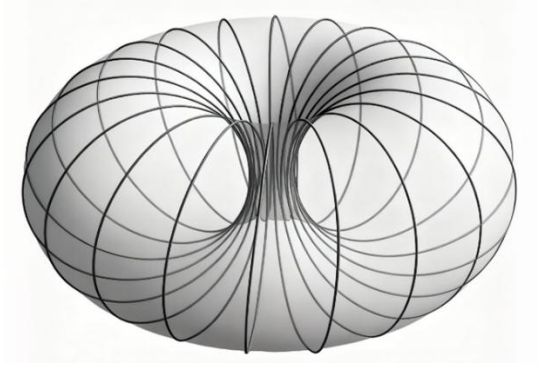

THE PHYSICS OF TIME

Living With Toroidal Coherence

MARCH 15, 2026

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All art work was drawn by the author, fed into Grok, X AI, or DaVinci AI, for line “clean up” and additional shading. These two AI applications turned my hand scratched sketches into acceptable pictures. Including the cover art.

The anatomical pictures were hand drawn by the author, using the examples offered in Rice University’s OpenStax and my old, tattered copy of Gray’s Anatomy as a reference.

Sheet music: First edition of Beethoven’s Piano Sonata No. 14 ‘Moonlight,’ Op. 27 No. 2, published by Breitkopf & Härtel (1802), digitized and made available by the Library of Congress (public domain).

I have no affiliation, partnership, or financial relationship with HeartMath, Elite HRV, Polar, or the Flow Genome Project (or any related companies). These are simply the tools and resources I’ve personally used and found helpful in my own practice.

Disclaimer

I am not a doctor, licensed medical professional, or psychologist. Nothing in this book is intended as medical, psychological, or therapeutic advice. The ideas, practices, and personal experiences shared here are for informational and exploratory purposes only. Always consult a qualified healthcare professional before making any changes to your health, wellness, or treatment plan.

From the Author

This book is a multi-disciplined approach to the way we look at and perceive time. Before we begin, I must tell you that I am not a physicist, scientist, biomechanical engineer, nor am I a credentialed philosopher. I don't have a formal background in medical science, quantum physics, or cosmology. I have never officially studied any of these fields under the tutelage of a renowned or qualified instructor.

I have not spent the countless hours hovering over a microscope or in collegiate classrooms to discover the basis for this theorem.

I have once again, like in my first book (American Titans, about an antediluvian culture and paleoclimatology) picked through the mountains of information that was tirelessly produced by others, in order to piece together a new theory.

Time relates to all of us, often in ways we don't fully understand. This theory may help us all better understand our place in the universe, and our place in time.

The Flow of this book has a purpose. I spend a couple chapters mansplaining my rudimentary understanding of science. This lays a foundational basis for you to understand what exactly we're trying to do. If you can tolerate a couple chapters of science-y stuff, then the following chapters will make more sense. I added even more science-y stuff, in appendixes at the end of the book, along with a little personal story and some suggested reading ideas.

Introduction

“Time is a man-made construct”, we’ve all heard it. Some of us have probably said it. It’s twice true and once false. Let me explain.

The way in which we measure and track time is a man-made construct, that’s true. The clock, the calendar, and the stopwatch, are all man-made constructs. But they are really useful ones.

Time itself is a semi-physical entity, almost like a form of energy. It is physically made up of “stuff”, and it has a physical form that can be defined. Time is mathematically understandable and provable. Time follows an elegant yet simple form of intelligent design. Therefore, it is, in fact, constructed.

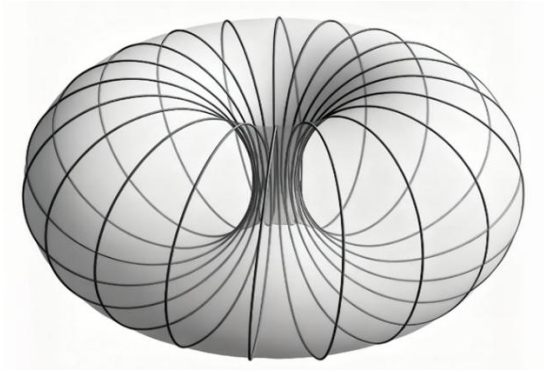
Time, however, is not constructed by man. We merely devised ways to chart it. Time is created by the forces of nature and the laws that govern the Universe. It is not an artificial construction that can be undone in any way therefore the colloquialism of the construct is also partly false. Time is not a false construct that holds no meaning.

Time should not be ignored. It may be merely measured by our man-made constructs, but it’s a very real, natural phenomenon that permeates everything. Time is, in a word, phlegmatic.

Time may even be moldable, manipulated, and influenced.

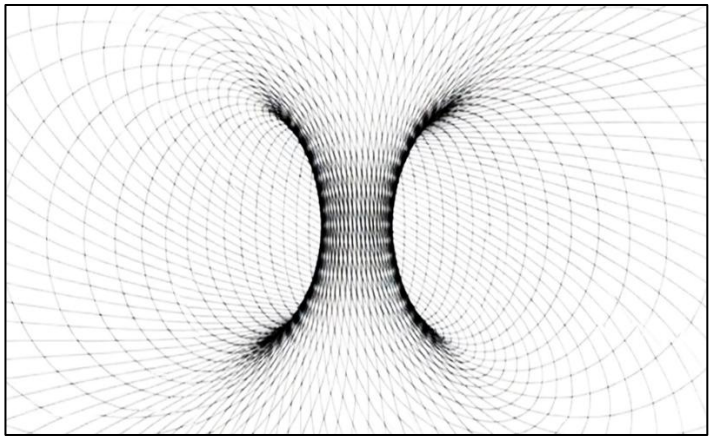
The Shape of Everything

If you're not familiar with the Toroid (or the Torus), let me introduce you. **This is the shape of everything**.



When I say it's the shape of everything, that's exactly what I mean. This is the shape of the building blocks that make up everything in the Universe. From the Universe itself down to the smallest sub-atomic particle. Everything is either; in this basic shape, or is constructed out of things that are made of "things", in this shape. You, me, the Moon, the Milky Way Galaxy, all are in this shape, or are made up of things that are this shape.

A toroid is a three-dimensional geometric shape that resembles a doughnut or ring. It is formed by rotating a circle, called the "tube" or minor circle. This "tube" moves around an axis that lies in the same plane but outside the circle itself. It is the rotation that creates the "hole" in the center. This hole can be nearly pinpoint thin at its center, presenting an hourglass like shape to the central column. The surface of a toroid is continuous and closed, it has no edges or corners.



The toroid is the shape of a magnetic field. All magnets have this "invisible" toroid around them. This magnetically driven cosmos makes sense in an "Electric Universe".

The Electric Universe theory (EU) is a theory that prioritizes electricity over gravity. The Electric Universe theory proposes that electricity, not gravity, is the dominant force shaping the cosmos. In this view, the Universe is filled with plasma (ionized gas), which conducts electric currents over vast distances. These currents generate magnetic fields that organize matter into filaments, toroids, and other structures we observe from galactic scales down to stellar and planetary systems. Stars, for example, are powered, primarily by electric currents flowing along these filaments rather than solely by internal nuclear fusion alone. Likewise, phenomena like comets, auroras, and planetary craters are better explained by electrical discharges than by purely mechanical or gravitational processes. The EU theory argues that many astronomical puzzles, such as galaxy rotation curves, cosmic web formation, and solar wind acceleration, find simpler and more observationally grounded explanations. At its core, the Electric Universe sees a connected,

current-driven cosmos rather than an isolated, gravity-dominated one.

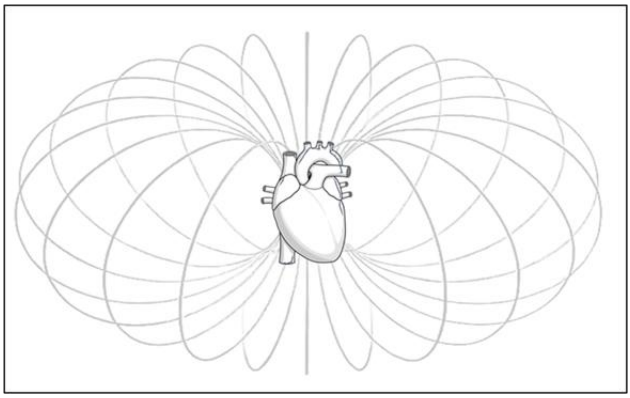
EU theory doesn't suggest that stars don't have nuclear fusion, or that gravity isn't real. Again, the Electric Universe theory simply proposes that it is electricity, and not solely gravity, that is the dominant force responsible for shaping the cosmos. Gravity remains a fundamental force and is essential for many phenomena, such as planetary orbits and galaxy clustering. However, gravity plays a supporting role compared to the far stronger electromagnetic forces acting across plasma.

You, as an individual, play a part in the Electric Universe. You have a magnetic field around you. Each individual has their own personal magnetic field that completely surrounds them. You can't see it but there. It's been measured and studied at great length.

The body's magnetic field originates in our heart. The heart generates the body's strongest rhythmic electromagnetic field through the synchronized electrical activity of its muscle cells during each heartbeat. The heart's magnetic field is 100x stronger than its closest competitor, the brain. The heart's toroid envelops the entire body. It influences cellular processes, emotional states, and can even influence subtle interactions with others nearby. Your personal toroid can be detected up to 3 feet away in all directions using sensitive instruments like SQUID magnetometers.

There is even some suggestion that a stronger field may be felt, as far as 21 feet away. We've all felt something peculiar, like when the atmosphere in a room changes as a certain person, feeling a certain way, walks in. Suddenly, everything changes, as if their mere

presence changed the emotional temperature of the space around us (for better or for worse). Even stranger, there has been some suggestion that the heart's magnetic toroid may be felt halfway across the world by individuals that are closely connected to each other, like mothers to their children or between twins.

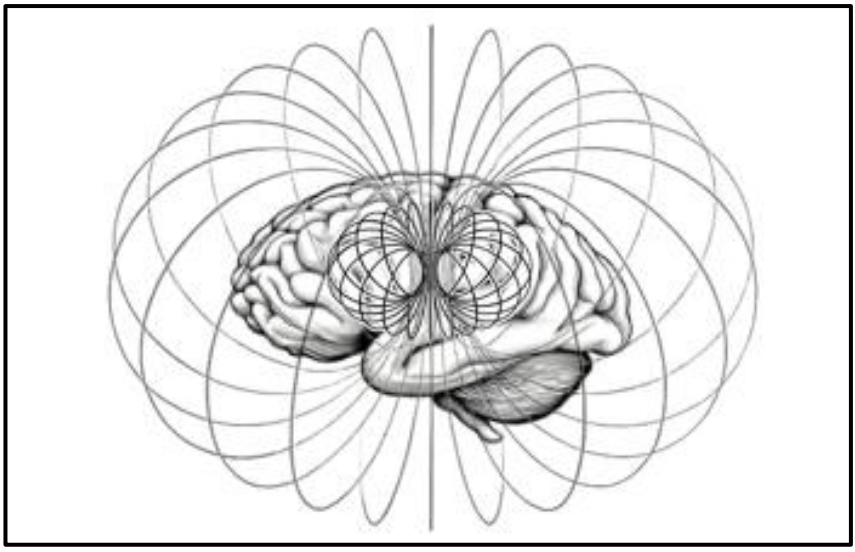


The brain itself actually generates two magnetic fields. The largest of these two toroids comes from the cortex. The cortex is the outer, thinking surface of the brain. It's the "gray matter" that we typically associate with the brain. The cortex toroid is a byproduct of the electrical activity of this part of the brain. The cortex toroid only extends out a few inches from its point of origin.

Deep inside the middle of the brain, the feeling and remembering parts, the limbic system, creates its own smaller, more intimate toroid. It is "nested" inside the larger one.

These two aren't separate. They talk to each other constantly. The larger cortex field is slower and rhythmic, it can set the tone for both, like a silent drum beat. The smaller limbic magnetic toroid is faster and is packed with more detailed information. These two fields complement one another. The smaller limbic field introduces

information, adds emotion, and memory. The outer cortex field dictates the pace and turns the information it received, into decisions and actions.

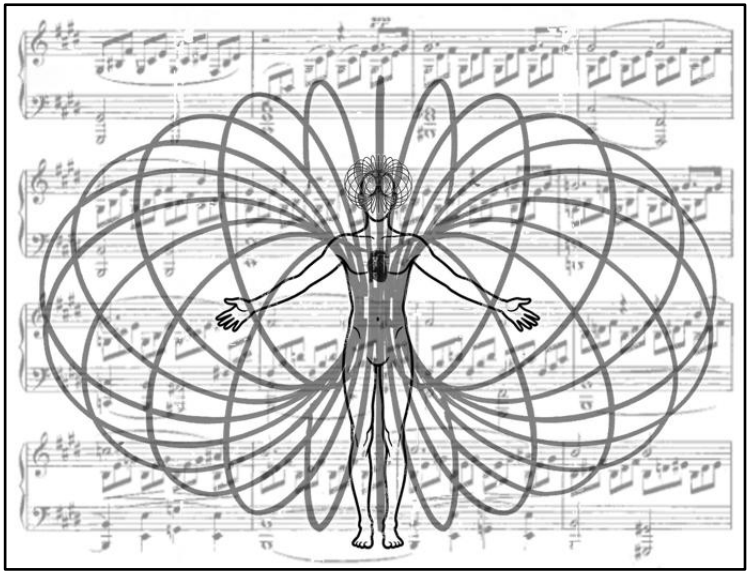


Because they're both weak and close together, the conversation stays mostly private, it stays inside the skull, safe and efficient.

These two nested brain toroids are encompassed within the whole body's magnetic field. The heart's toroid, being much bigger and 100 times stronger, can then influence the whole operation.

The larger, more powerful field can drive the smaller fields. Like a silent drumbeat that influences the entire orchestra of processes and bio-mechanism. The heart's toroid influences the brain's toroids through what is called entrainment and phase-locking. That means that the bigger drum ends up directing the entire band. This is seen by studying the brain's activity during heart rate cohesion exercises. By purposely directing the heart to sync up with the brain, all three

toroids get in sync with each other. It's like getting all the different instruments on the same page of music, and all operating at the same tempo.



A toroid vibrates with continuous frequency. It's the almost lifelike nature of the shape. A magnetic toroid is constantly vibrating like a plucked guitar string. The vibrations are primarily carried out along the external loops. The signal originates from the center, loops out along the outer periphery and returns to center, only to go back out again. A secondary signal spins out from the center in a ripple like form along the equatorial plane in the middle. This secondary signal is in a waveform that spreads out from the center, reaches out to the widest part of the arcing loops, then potentially bounces back to center.

Both of these mechanisms often work together. A signal might start as a ripple in the equatorial plane, then get picked up and carried

along the looping field lines for wider distribution. This dual pathway makes toroidal systems efficient and resilient. The embedded information can loop internally for stability or ripple out for broader effects.

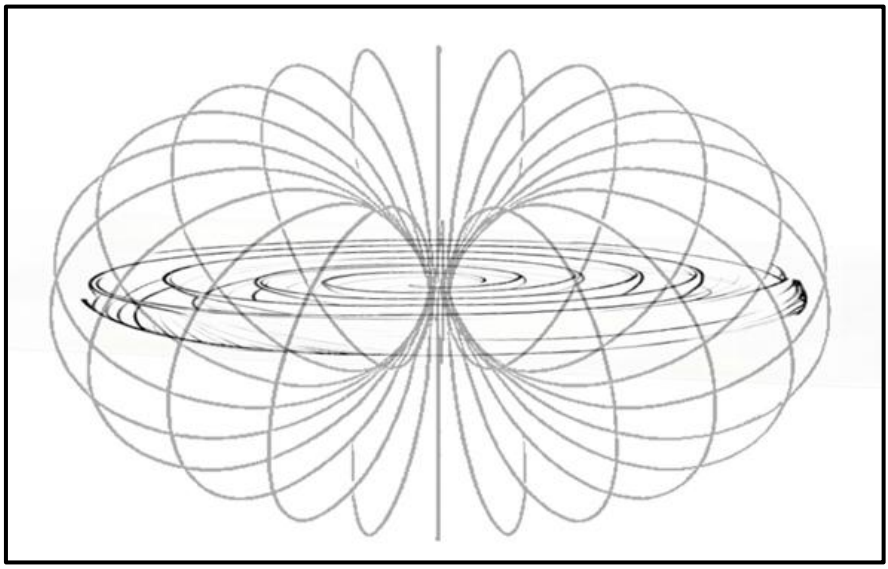
The outer loop vibrations are called Alfvén waves. They are magnetohydrodynamic waves (MHD waves) that ripple through plasma ropes, like vibrations on a string. The information “rides” the looping paths, maintaining coherence as it circulates the toroid without dissipating quickly. This is how stable, long-range communication happens in toroidal systems. You may want to think of it as the signal following the “highway” of the field lines.

Alfvén waves aren’t “made of” plasma like a solid object is made of atoms. Instead, they are disturbances or wiggles that travel through the plasma, using it as the medium.

Pc pulsations are often made of or driven by Alfvén waves. Pc pulsations (short for “pulsations continues”) are a class of regular, quasi-sinusoidal oscillations in a geomagnetic field. These Pc waves are often carrying information in little bursts that scientists call “pearls”. These Pc pearls sometimes come from electromagnetic ion-cyclotron (EMIC) waves. They are part of the broader category of geomagnetic pulsations or ultra-low-frequency (ULF) waves in a magnetosphere. They are like radio waves.

The inner ripple that spreads out along the equatorial mid-plane is like a flat “disk” or current sheet bisecting the toroid. It ripples outward with information. This happens through instabilities like magnetic reconnection, where field lines break and reform, releasing energy bursts. These are MHD waves that propagate

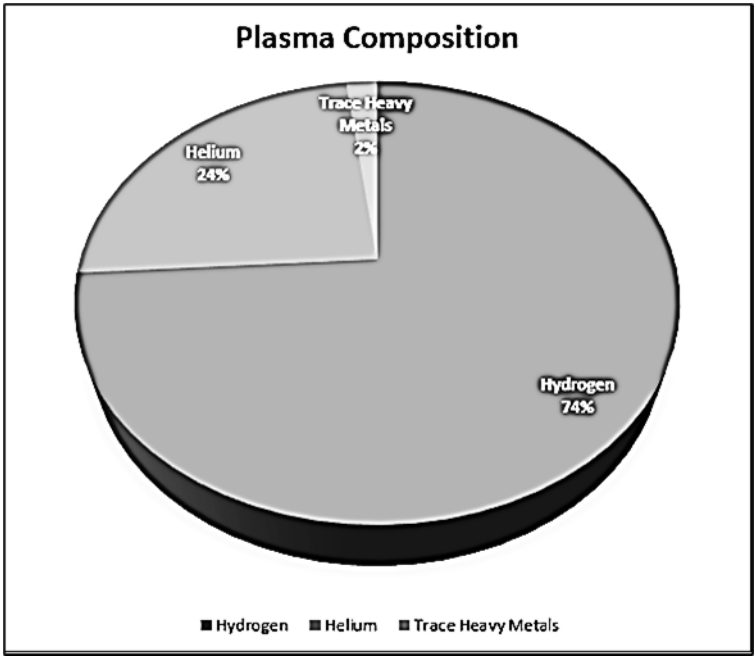
perpendicular to the plane. Ripples here spread like waves on a pond, carrying perturbations radially outward or inward, often triggering changes in the overall structure. In plasma toroids, this plane is where the densest currents flow, so it's a hotspot for signal emission.



The inner ripple or midplane wave comes in two forms: fast and slow. These are called fast-magnetosonic waves and slow-magnetosonic waves. It's like an old-school vinyl record that plays at two speeds at the same time, while also playing each speed both directions at the same time. It's, conceptually, very cool, and has the ability to transfer a lot of information very efficiently.

This information has form. It has structure. It's physically constructed of material. That material can be explained in the Periodic Table of Elements. Essentially, the magnetic toroid has chemistry. The toroid is made of plasma consisting of; Hydrogen (H):

~74% by mass (mostly ionized protons and electrons). Helium (He): ~24% by mass (ionized alpha particles). Trace Heavy Elements (Metals): 2% total, including oxygen (O), carbon (C), nitrogen (N), iron (Fe), and neon (Ne). The plasma's "physical form" is a quasi-neutral mix of ions and electrons, with the additional elements being determined by the source material.



Alfvén waves, Pc pulsations, magnetosonic waves, and magnetohydrodynamic waves are not completely separate things. They are flavors of the same family of waves. Which means they are waves that travel through magnetized plasma. The plasma itself is the medium. The charged particles are what carry the wave. All these waves exist in the same plasma soup. The soup is made of hydrogen, helium, and trace elements. The particles are moving

together, so any wave that disturbs the plasma affects the whole soup.

The particles with mass that play the starring role are the ions. These ions have real mass. The wave's inertia comes from the mass density of the ions

(ρ = total ion mass per volume)

The positively charged protons and alpha particles (ions) move with free electrons. The ions, being much heavier, carry the main momentum. When a disturbance ripples through, it's the ions that slosh along the magnetic field lines or get compressed in the mid-plane, passing the signal along like a wave.

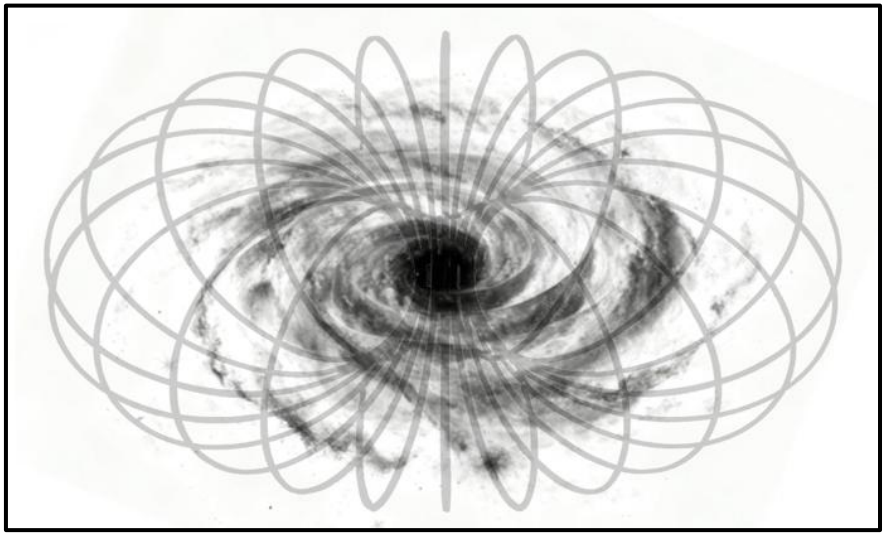
There isn't really any confrontational competition between plasma toroids. It's not; "Alfvén plasma" vs. "magnetosonic plasma". It's the same hydrogen/helium/trace-element plasma responding in different ways depending on the direction and speed of the disturbance.

When an Alfvén wave hits a region of changing density, magnetic field strength, or current, part of its energy can convert into a magnetosonic wave. Conversely, a magnetosonic wave can generate Alfvén waves when it interacts with field lines. This is commonly called "coupling". It is in this dance of coupling, that the information is exchanged between different toroids.

This coupling, or synchronous dance, happens all around us, all day, every day, and everywhere. Ions carry the tune, vibration dictates the melody, and the larger toroid drives the beat. You may think of this exchange of information as; Ions delivering packets or pearls of information. It's almost like the notes on a page of sheet music.

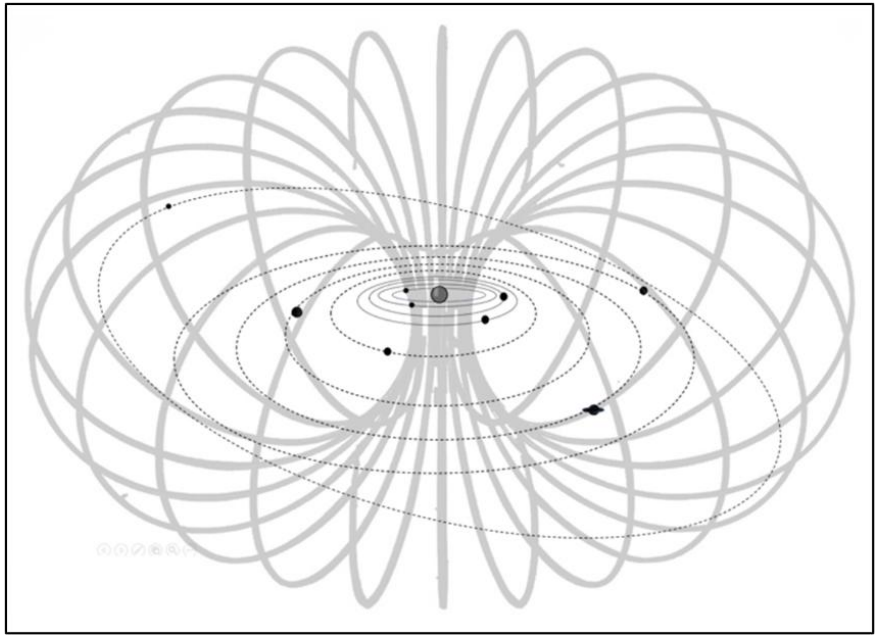
The Cascade

The Toroid really is the shape of everything. The entire Universe is in this shape. I mean, *in* this shape. It may flex, bend, expand and contract with the passing of eons, but it remains in this particular shape. Space itself is not an open vacuum of nothingness. It's essentially a plasma bubble in the shape of a toroid. The outer shell of this giant magnetic plasma bubble encompasses several smaller toroidal layers inside it. Everything in the Universe is nested inside the toroid of the Universe. Inside this toroid is a vastly stretched web of plasma. All the stars, all the dust, all the cosmic junk, and all the galaxies are encompassed within the toroid of the Universe.

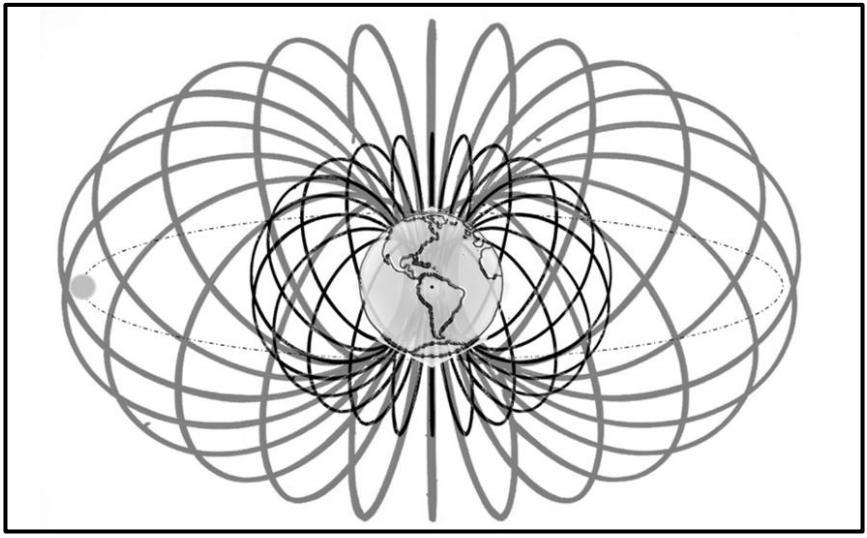


You may know the Milky Way galaxy as disk-like shape with spiral arms consisting of millions of solar systems branching out in a few semi-circular arms. This is true, but that spiral galaxy rests inside a giant toroid. The Milky Way's Toroid is formed by its magnetic field, that originates from its center. This is because the very center of the Milky Way is a magnet; it's not a black hole, as many have been taught. The galactic toroid is the result of the galaxy's magnetic core. The Milky Way galaxy has 4-6 layers, in its multi-layered toroid.

Likewise. Our sun has a magnetic field that originates from its dense and magnetic center. All the planets in our solar system, are inside the sun's magnetic toroid. The sun's toroid is 2-3 layers deep. It also has several active loops and active zones near its surface.

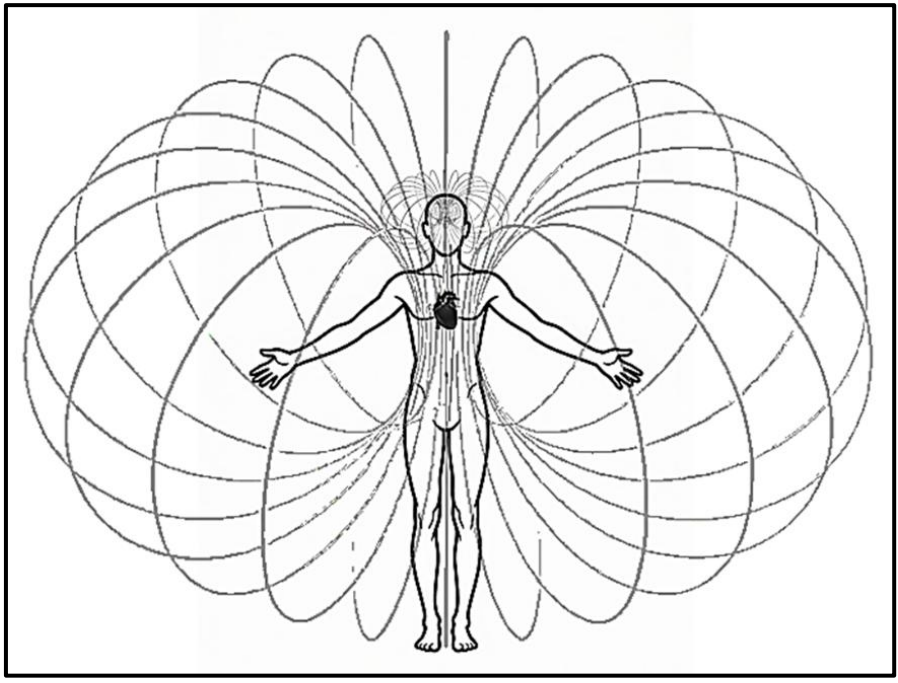


One step down, the Earth has a magnetosphere too. The entire planet is encompassed within the Earth's magnetosphere. The Earth's magnetic field originates in its molten nickel and iron core. You may know the Earth's magnetosphere as our primary protection from the Sun's damaging effects. The Earth has a multilayered toroid with 2-5 layers, based on how you chose to count them.

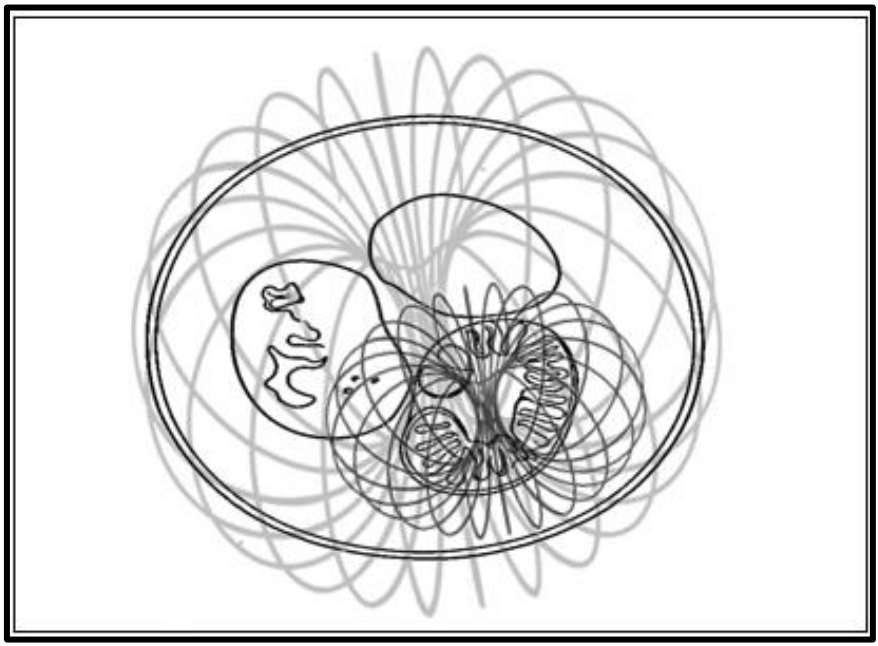


On the surface of the planet, the billions of living things each can produce their own magnetic field. Therefore, all living things on the planet have their own toroids. Cats, dogs, trees, rose bushes, even mold and fungi have weak little magnetic toroids.

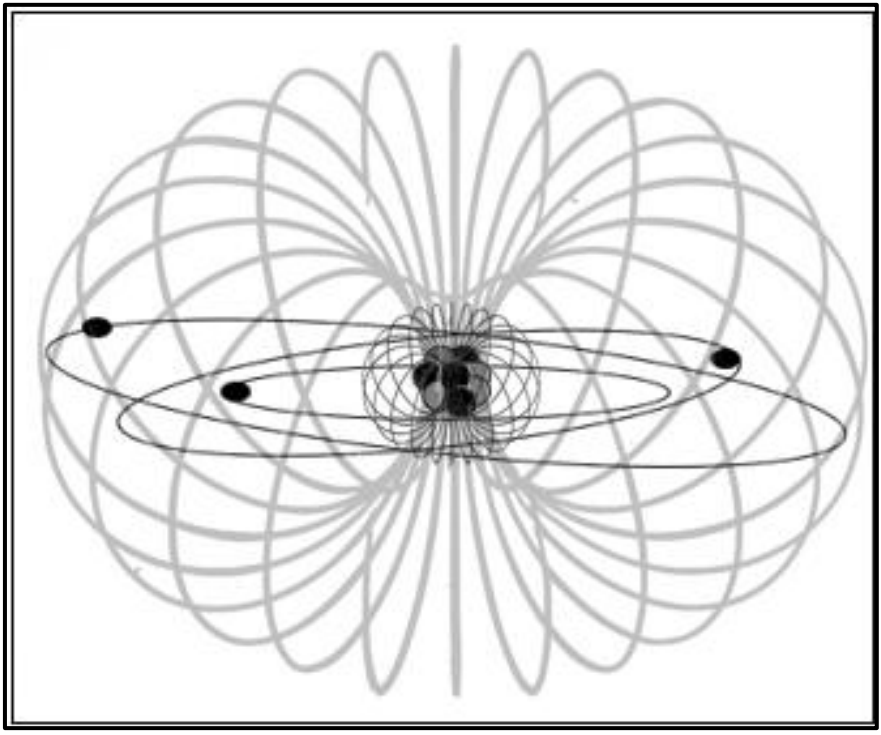
This “magnetosphere” around the human body is its biomagnetic field. The human toroid is a somewhat weak, but still measurable, electromagnetic field generated by bioelectric activity. We’ve already briefly discussed the human body’s magnetic field. This field is 3 toroids. We’ll discuss the human body’s toroid in greater detail later.



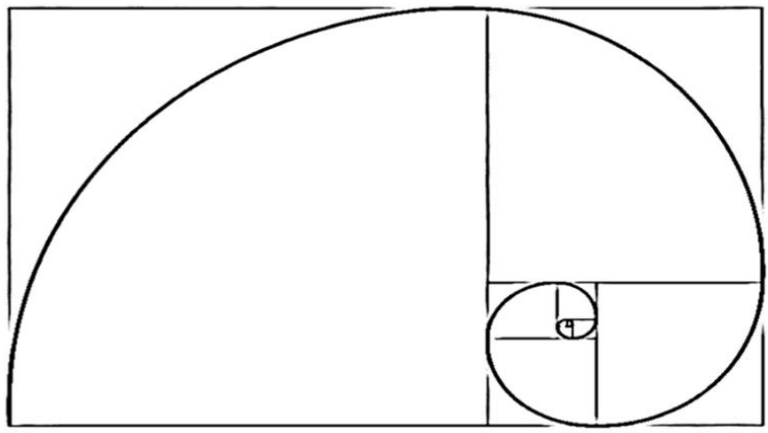
The next step down is the single cell. Guess what; the individual cell has a little tiny toroid of its own. Actually, the cell has two toroids. They are extremely weak and very close to one another. It's like a double walled toroid. The exchange of ions through the cell wall creates tiny electrical currents. It's not much, but it's enough to generate a micro toroid. The mitochondria (the powerhouse of the cell) generates tiny amounts of current as well. The toroid from the mitochondria is slightly smaller than the cell wall's toroid, and these two toroids run one just inside the other.



The next step down is the atom. And wouldn't you know it; the atom has a tiny little toroid too. There is even some suggestion that the atom may have two toroids. One for the proton/neutron in the center, and a second one for the electron shell on the outside. It's pretty hard to detect such a weak force in such a small thing, but it's there. Like I said, the toroid is the shape of everything.



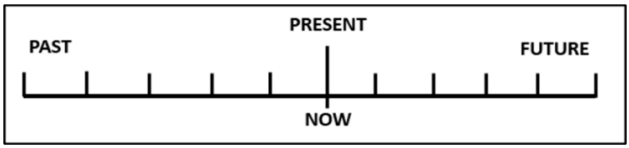
This cascade of toroids follows the natural numeric parallel. In 1 Universe, there are 10^{12} galaxies. In each galaxy there are approximately 10^{11} solar systems. Each solar system has roughly ~10 planets (and 10^{11} other debris). Earth has roughly ~10^{10} people. A person has about 10^{13} cells and then 10^{28} atoms. This numerical sequence is akin to the Fibonacci sequence. Also known as the "Golden Ratio". It's a very organic fractal pattern. Just as nature intended.



The golden ratio isn't some magic number we forced on nature. It's what happens when things grow efficiently. You add the last two steps to make the next one. Wrap that growth into a spiral, curl the spiral into a doughnut, and boom: the same shape appears in galaxies, your heartbeat, your DNA, and inside atoms. It's nature's signature.

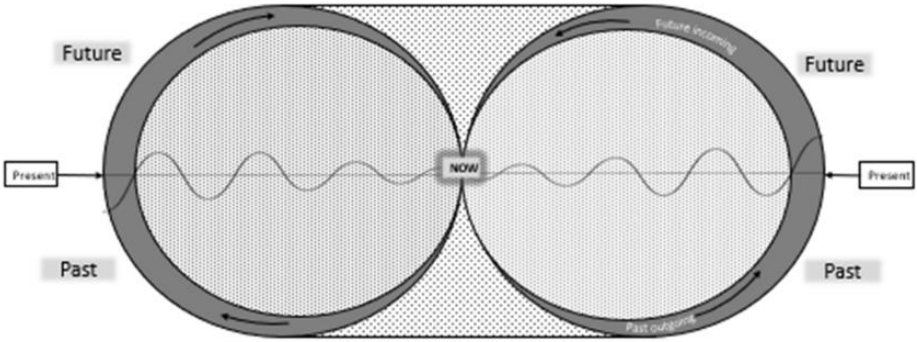
The golden ratio $\phi \approx 1.618$
The Fibonacci sequence (1, 1, 2, 3, 5, 8, 13, 21, 34…)

So, what does this have to do with time? Time is not a straight line. We may teach the youngest children the "timeline" as a straight path, with a future, present, and a past, and this elementary model works for the most basic of introductions, but it is not representative of the true shape of time.



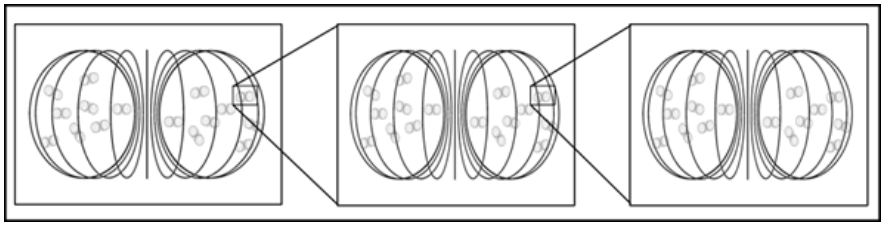
Time exists in a magnetic toroid. The shape of everything, including time itself. Time follows the natural sequence of nature's golden ratio. Time is adherent to the Fibonacci sequence.

Imagine a toroid as the model for time, with a past, a present, and a future, running along the curves of the toroid. Time following the natural flow of nature.



This is the shape of time. It's not just a philosophical thought project. It's not a man-made construct. It is a physical entity with energy, form, and chemistry. Time is formed by the natural progression of the universe, and it is in line with the laws of nature.

Toroids are able to interact with each other. The coupling and exchange of energy and vibrational patterns are like packets of information that are passed from one toroid to another. The larger the toroid, the more it drives the beat. The smaller the toroid, the more detailed its information.



We now have a cascade pattern from the Universe down to the tiniest sub-atomic particle. This cascade can be expressed in a number of ways. I can verbally describe to you, as I have attempted. I can try to draw it for you and express it through illustrations. And it also can be expressed in mathematics. It's provable mathematically.

$$\Omega\_cascade=(((J\_uni\otimes J\_gal)\otimes J\_sun)\otimes J\_earth)\otimes J\_heart$$

For the purposes of this book, we will focus on the human element of this cascading equation. We will direct our attention to how time affects us, and more interestingly, how we can affect time.

There is a more detailed appendix for the math in the back of the book.

Synchronicity

The primary driver of our personal magnetic toroid is the heart. The heart is not just a mechanical pump; it is a living electrical generator wrapped in conductive fluid, and blood plasma. Every heartbeat produces a large electrical current loop that, by Ampère's law, creates a corresponding magnetic field.

The heartbeat begins with an electrical impulse from the sinoatrial (SA) node. Think of the SA node as the heart's natural pacemaker. This impulse spreads across the atria, then through the atrioventricular (AV) node and down the bundle branches to the ventricles.

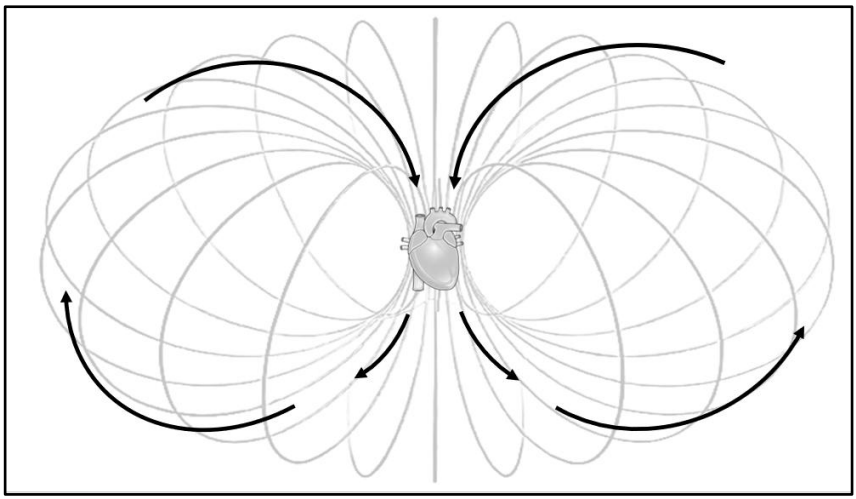
Millions of cardiac muscle cells then suddenly depolarize in a coordinated wave. Then billions of charged ions rush across cell membranes. This creates a massive, looping electric current that travels from the top down through the ventricles and back up, via return paths in the extracellular fluid.

Blood plasma is a salty, conductive electrolyte solution. The moving blood itself carries charged ions and proteins. This adds additional momentum to the current loop.

The heart's four chambers and spiral muscle fibers, called myocardium, naturally form a helical and toroidal pathway for this current. The current flows down one side, loops around the apex, and returns in or on, the other side.

The current doesn't flow in straight lines; it follows the spiral architecture of the heart muscle. Technically, these currents are called double-helical myocardial bands. This current flow creates a large, closed current loop that encircles the heart's long axis.

The resulting magnetic field lines emerge from one pole, arc outward, and re-enter at the opposite pole. It creates the classic toroidal field pattern.



Basically, the heart generates its own powerful magnetic toroid through a coherent, large-scale electric current loop, created by synchronized ion flows across millions of cardiac cells, guided by the heart's spiral muscle architecture and amplified by conductive blood plasma. It's the body's biggest, most rhythmic electromagnetic generator. It's a living toroid right in the center of your chest.

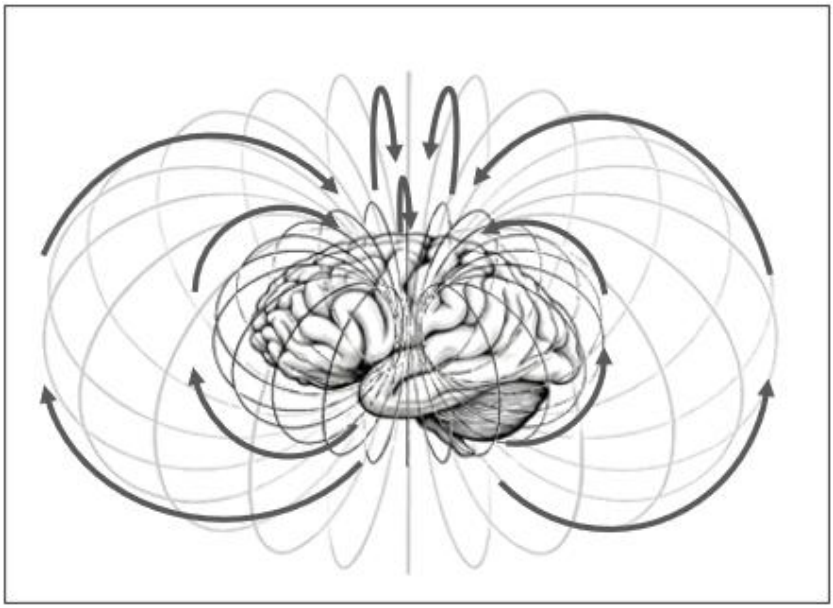
In the brain, the cortical and limbic "toroids" aren't perfect doughnuts like a plasma filament or heart field—they're more like loose, nested magnetic loops formed by the brain's electrical currents. But they follow the same basic principle: ion flows create current paths that generate weak magnetic fields, with toroidal topology.

The neocortex, the wrinkled outer surface of the brain where thinking, sensing, and deciding happen, generates the brain's strongest, albeit still weak, magnetic field. It does this through synchronized electrical activity in its pyramidal cells. The current typically starts in deeper cortical layers and spreads outward to shallower layers. It then returns via extracellular fluid paths. This forms large, arching loops that follow the brain's hemispheric shape. The current flows out along one gyrus, arcs across to another, and loops back inward.

The cortex's curved, folded architecture guides these currents into broad, closed loops around each hemisphere. The resulting magnetic field lines emerge from one "pole", arc outward over the skull, and re-enter at the opposite "pole", creating a flattened toroidal pattern. It's like a big, lopsided donut, wrapped around the brain's surface.

Deeper inside the brain, the limbic system generates an even weaker magnetic field. It's "nested" within the cortical layer, like a smaller whirlpool inside a bigger one.

The hippocampus is a curved, or "C-shaped" structure. Current flows along its long axis, loops back through, and re-enters, creating tight little current circuits. The limbic structures' looped anatomy, with the hippocampus curling like a seahorse, guides currents into compact, closed paths. Magnetic field lines form small toroidal loops: emerging from one end, arcing around the structure, and re-entering at the tail. It's all embedded inside the cortex's larger loop.



This magnetic passage of information isn't the only way these parts of your brain communicate. There is a hard-wired connection as well. For medical and anatomical clarity, there are very real, physical connections between the limbic system and the cortex. These are not just vague influences or weak fields; they are direct, structural neural pathways made of bundles of axons (white matter tracts) that carry electrical signals rapidly and reliably from limbic structures to cortical regions and back again.

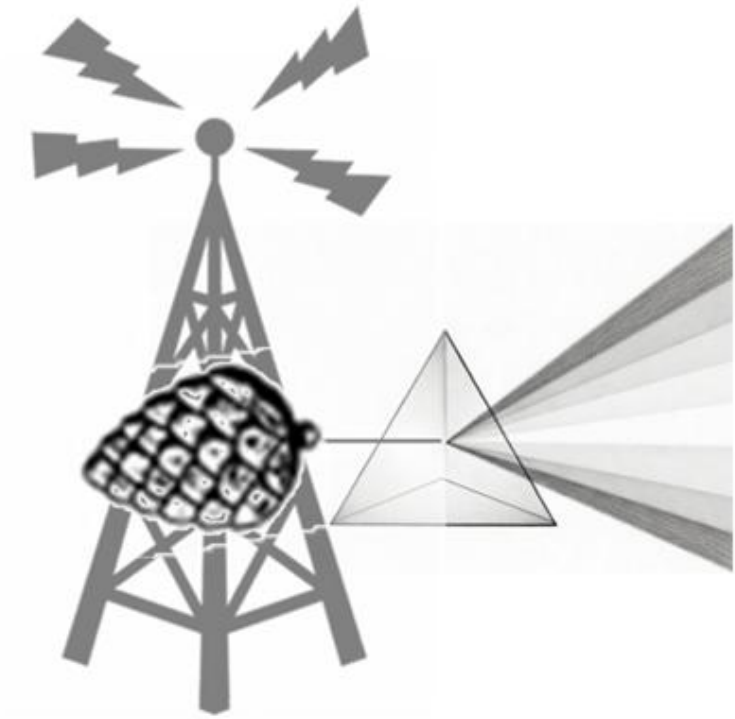
There is also a chemical connection between the limbic system and the cortex. The ventricles, which are filled with cerebrospinal fluid (CSF), are the primary physical pathway for that chemical communication. This is an additional, established mechanism in neuroscience, it is often referred to as volume transmission or neurohumoral signaling. This chemical connection works in parallel with the hard-wired neural tracts and the magnetic signaling.

While these systems work in close concert with each other, the magnetic toroid is open to outside influence. It can receive signals. In fact, it's built almost specifically, for that express purpose.

The limbic system is set up as an antenna. It's actually an antenna array, made up of multiple antennas. Those antennas are chemically composed of materials that are magnetically sensitive. The limbic system antenna array is uniquely designed to receive the magnetic signals, from outside toroids.

The hippocampus is loaded with cryptochromes. These have known magneto-sensitivity, via their radical pair mechanism (RPM). The hippocampus also has Biogenic-Magnetite Nanoparticles. They are, as you may expect, explicitly magneto-sensitive. The hippocampus also has high levels of Ferritin, Calcium ions, and Tubulin. All of these specific chemicals compose the magnetically sensitive antenna that we call the hippocampus. This antenna can receive packets of information from another magnetic toroid. It is uniquely constructed in such a way that makes it optimal for doing just that.

The pineal gland, often called the “third eye”, plays a role in this antenna array as well. The pineal gland is largely known for its piezoelectric (PE) properties. This means that despite its position deep in the center, near the mid-brain. It can still react and be sensitive to light. However, PE isn’t only sensitive to light. PE can be sensitive and respond to Ultra-Low Frequencies (ULF). Literally radio waves.



Magnetic toroids actually generate radio waves in three different ways. First through “mode conversion” and radiation. In a magnetic toroid, Alfvén waves propagate along the looping field lines, carrying energy and perturbations from plasma currents. When these waves encounter inhomogeneities, such as density gradients or boundaries

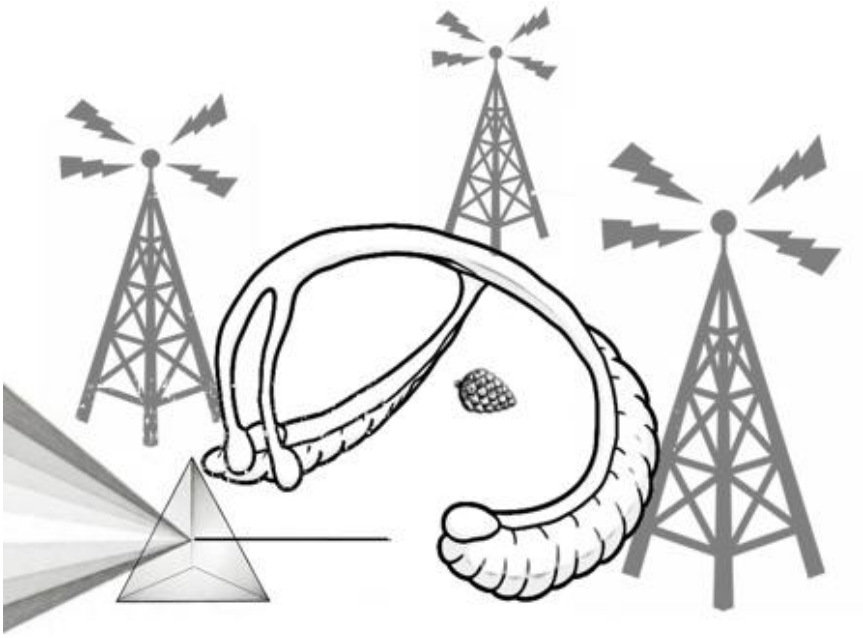
in the toroid, like the mid-plane current sheet or the plasma edges, part of their energy converts into electromagnetic (EM) modes. This conversion radiates ULF waves outward as low-frequency radio emissions, similar to how a guitar string's vibration radiates sound.

The second way magnetic toroids generate ULF radio waves is through what are called Instabilities and Oscillations. Toroidal structures often develop instabilities, such as magnetic reconnection or kink modes, where field lines twist or snap. MHD waves amplify these instabilities, leading to oscillatory bursts that emit ULF radio waves.

The third way that magnetic toroids generate and emit radio waves is by the act of "coupling" between the wave types. Alfvén waves, traveling along field lines, can couple with magnetosonic waves that are compressing across them. This transfers energy and generates hybrid modes that radiate ULF EM waves. In a toroid, this coupling is enhanced by the closed-loop geometry, where waves circulate and build up resonance, eventually leaking out as ULF radiation.

The pineal glands organic chemistry is uniquely suited to pick up on these ULF waves. The piezoelectric micro-crystals are extremely sensitive to this type of signal.

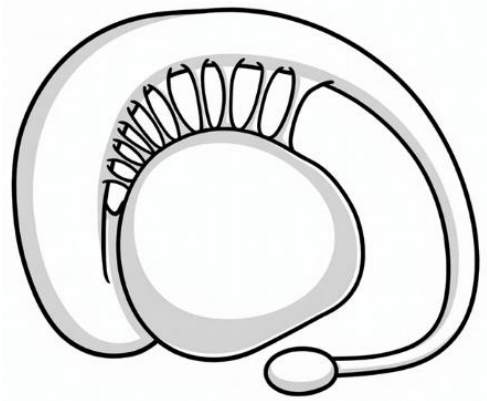
We now have an antenna array that is able to receive and potentially even triangulate multiple incoming signals from outside toroids.



This offset group of antennas provides the framework triangulation. Triangulation is using receivers at different locations to calculate the location of the sender. In old-school cartography terms, it's like taking a back-azimuth from at least two known and visible locations. You then plot those azimuths from the known locations on the map. The point where these lines intersect is your precise location. In basic land navigation, using a map and compass, this called resection. The antenna array in your brain is set up to do this very same thing.

The limbic system receives the "raw" signal from outside, but these packets of information still have to be processed. Once the antenna array picks up the signal, someone has to make sense of it. Something has to decide what it means. That's where the basal ganglia step in. Deep in the brain, this structure acts like an

interpreter or meaning-maker. It doesn't receive the raw cosmic whisper directly, the hippocampus and pineal do that. The basal ganglia take the packets of information from the antennas and run them through their own filter. This basal filter is rich in neuromelanin and ferritin, it weighs the signal against stored habits, rewards, and emotions: Is this a threat? An opportunity? A memory trigger? The basal ganglia assign a quick verdict: go, stop, crave, release. It then relays its initial judgment to the prefrontal cortex for action. The cortex then makes the final judgment and decides what the body should do in response. The two basal ganglia structures are the decoders that turn cosmic data into human purpose, they are the bridge between the antenna array's reception and the mind's final decision.



For anatomical completeness, we have to mention the corpus callosum. This is like the mailroom of the brain. The corpus callosum is a thick band of white tissue that has hairlike fibers running out of it. It connects the two hemispheres along with the limbic system, the midbrain, and all the brain's components. It's a hard-wired communications system. This is like a corporate mailroom that

handles all the regular information passage between offices. The corpus callosum takes information from the basal ganglia and delivers it to the appropriate section of the cortex.

All of this processing and communication takes time. Sometimes a faster response is warranted. Before the basal ganglia even finish decoding, the cerebellum is already moving. This 'little brain' at the back of the skull is loaded with more biogenic magnetite than almost any other region. The cerebellum is also loaded with ferritin, calcium ions, and tubulin. All the material that's necessary for a properly functioning antenna array for magnetic signals. So, obviously, the cerebellum receives the signal, just as the limbic system does. However, the cerebellum doesn't emit a notable magnetic toroid of its own. What does it do with the available information?

The cerebellum acts as the first responder. It catches the incoming ULF pulse from the cascade and fires off a raw, unprocessed 'heads up'. It doesn't wait for full analysis. That cerebellum signal shoots to the medulla oblongata, the brainstem's lower gatehouse, where it triggers the top of the spinal cord. The medulla oblongata has documented concentrations of biogenic magnetic nanoparticles and related materials that could theoretically receive weak magnetic signals, similar to the "antenna array" of the limbic system.

From the medulla oblongata, rapid autonomic commands ripple out: adrenaline spikes, breathing quickens, sweat starts, posture shifts, all in a split-nanosecond. It's not thoughtful; it's instinctive. The cerebellum doesn't broadcast a big toroid like the heart; its signal stays local, fast, and redundant. This quick ULF pulse, from the cerebellum to the medulla, is like the headline without the article.

It’s a premature signal, backing up the hard-wired nerves and slower chemical pathways with an early-warning radio pulse. In the moment of synchronicity, it’s the cerebellum that gets your body ready before your mind catches up.

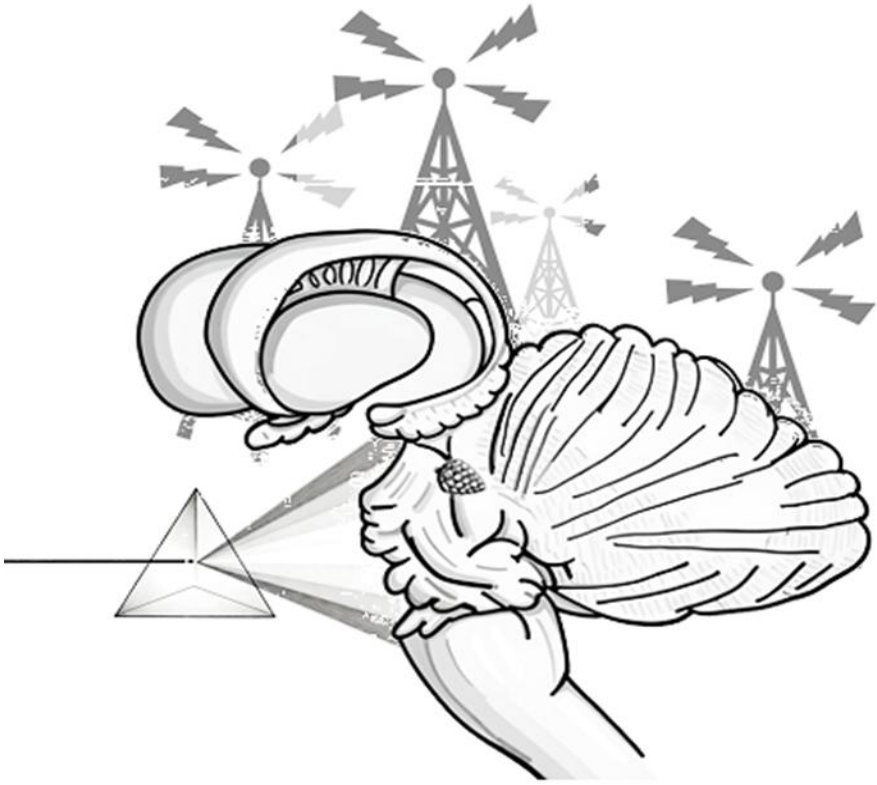
There is one more anatomical item that must be mentioned. The heart’s communication to the brain. The vagus nerve is the longest and most widespread cranial nerve, running from the brain, down the neck and directly to the heart.

It carries a significant amount of sensory information up to the brain. It’s estimated that about 80% of its fibers are sensory, relaying visceral signals from the heart to the brain.

The vagus nerve carries real-time signals from the heart to the brainstem and then up to higher areas like the limbic system and the cortex. The vagus also sends calming or activating signals back down from the brain, to the heart. In high coherence states, vagal tone strengthens, making the system more responsive to subtle cues, potentially amplifying signals.

This nerve bundle is the hard-wired, direct connection between the heart and the brain. While the heart's toroid communicates with the brain's duo of toroids, the human system prefers, and has, built-in redundancy.

That is the pathway of magnetic transmission in the human body. The other lines of communication still exist and function as they are well documented to do. The hard-wired system of nerve fibers still carries instructions. The even slower chemical signals still function as we already understand them. The magnetic and ULF rapid response system acts like redundancy in the nervous system's functioning.



The next step is figuring out, exactly, what signals are coming into this system? What magnetic toroids are emitting the signals that the brain receives? The cascading system of toroids provides the sheet music. This persistent and ongoing melody of time, is the flow of magnetosonic waves from the Universe to the galaxy, to the solar system, to the planet and finally to you. This is the physical skeleton of time. Its bubbles inside bubbles. Each one influences the next one.

So, here's where the anatomy meets the magic. The brain's antenna array doesn't just receive signals, it syncs them. The Universe provides the outer envelope and baseline rhythm. The galaxy and solar systems provide additional layers and details. The heart then provides the final details. The brain's nested toroids listen, process, and interpret. If warranted, the cerebellum and medulla oblongata can deliver an early warning.

This process of synchronicity is chartable, and mathematically provable. This is where the synchronicity equation comes in. It's not a complicated formula that you need to memorize. It's a simple way to describe the moment when your personal antenna array locks onto the cascade and starts steering the flow. Here's how it looks:

$$S_{sync} = \mu \cdot (M_{array} \cdot \Omega_{cascade}) \cdot \nabla J_{geo}$$

In plain language: your magnetic antenna array (M_array) couples with the incoming cascade from the cosmos (Ω_cascade), modulated by a small personal gradient (∇J_geo). When that coupling is strong, when heart, brain, and body are all coherent; the sync happens. Time stops being something that just happens to you and it starts being something you interact with.

Time is a magnetic force in the form of magnetic perturbations and magnetosonic waves, that carry information in tiny packets or pearls. These packets combine in a snowball-like effect, and coalesce in your brain. The different systems in your brain work with the incoming signal and interpret it, comparing it against memory and known experiences. These multiple systems, work in concert with each other, to create your perception of time. This process of your biological systems, working together, with known energetic

forces, turn the cosmic cascade into something you can perceive. This synchronicity isn't random luck. It's your body and mind tuning into the same magnetic rhythm the universe has been playing all along.

You don't have to understand every detail to make this work. You just have to put in some effort, to get in sync with it. Getting in sync will be how you interact with time, purposefully. This interaction is what we we'll discuss next.

Interaction, top-down

The transfer of information isn't a one-way street. The lines of communication go both ways. The larger toroids certainly drive the beat. The Universe gets to decide the speed at which things progress. The cascade is a bit of a hierarchy. Individuals, like you and I, are pretty low on that totem pole. Luckily, the director of the universal symphony is open to suggestions.

First, let's talk about the past.

Have you ever had the: "story of my life" moment? You know that voice in your head that says, "This always happens to me"? Not the good stuff, but the heavy stuff, the ugly stuff. The same argument with the same person that ends the same way. The opportunity that slips away at the last second, again. After the same door slams in your face. After you finally get your hopes up, only to watch the rug get yanked out, one more time. The same pitfalls. The same tragedies. The old, familiar disappointment. The feeling that no matter how hard you try, the same old pattern just keeps showing up, like the universe is stuck on repeat and you just can't change the channel.

You tell yourself it's just bad luck. You tell yourself you're overthinking. But deep down, you feel it: the pattern is too consistent, too cruel, too personal. Like the universe singled you out for the same script on repeat, and you're the only actor who can't improvise. It feels like some invisible hand kept dealing you the same losing cards, over and over again.

What if it isn't bad luck? What if it isn't fate? What if it isn't punishment? What if it's feedback? What if "this always happens to me" isn't a curse, but a loud, ugly signal from the cascade saying: You're still tuned to the wrong frequency. The universe isn't punishing you; it's waiting for you to change the station.

If you've ever felt trapped in your own "always happens to me" story, stick with me. There's an explanation. There's a way out.

Patterns are real. History does repeat itself. You're not just imagining it. The cyclical nature of the universe is real. Patterns do repeat. It's built into the framework of time itself. The patterns and events in time can be altered, or they can be reinforced.

Events are energy. That energy travels along the toroidal loops of time. That's why it keeps coming back around.

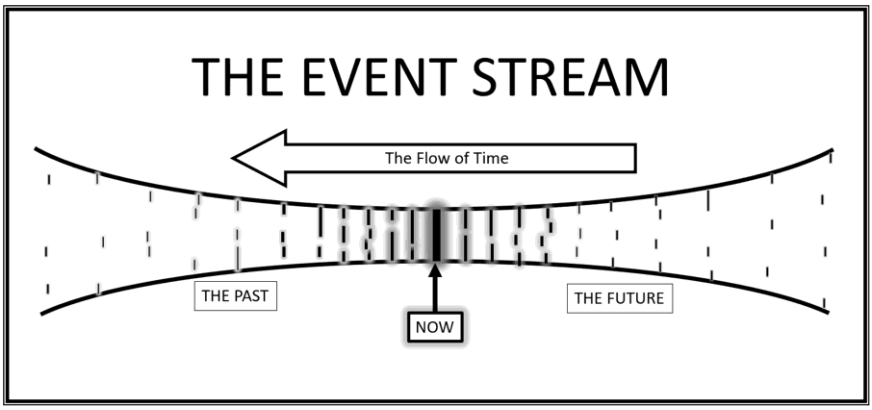
The law of conservation of energy states that energy cannot be created or destroyed, only transferred from one form to another. You can't destroy the event, but you can transform it. Energy can be influenced, it can be altered, it can be changed.

To learn how to change the energy of events, it may help to understand why, and how, they happen in the first place.

Let me introduce you to the "Event Stream". The term Event Stream (ES) was first coined by Clif High. Clif High has a background in predictive linguistics and computer programming. He has authored several on-line writings on Substack and has a YouTube channel, where he often discusses the ES. To my knowledge, the title *Event Stream* is his baby. I'm only borrowing it, as it helps explain what we're dealing with here.

To explain ES, I'm going to start by using a linear "Time Line". We will eventually correct that elementary form into the proper shape, gut hey, we gotta start somewhere.

Imagine a timeline that flows from right-to-left. With the future on the right and the past on the left. The present, or the "Now" is in the middle.

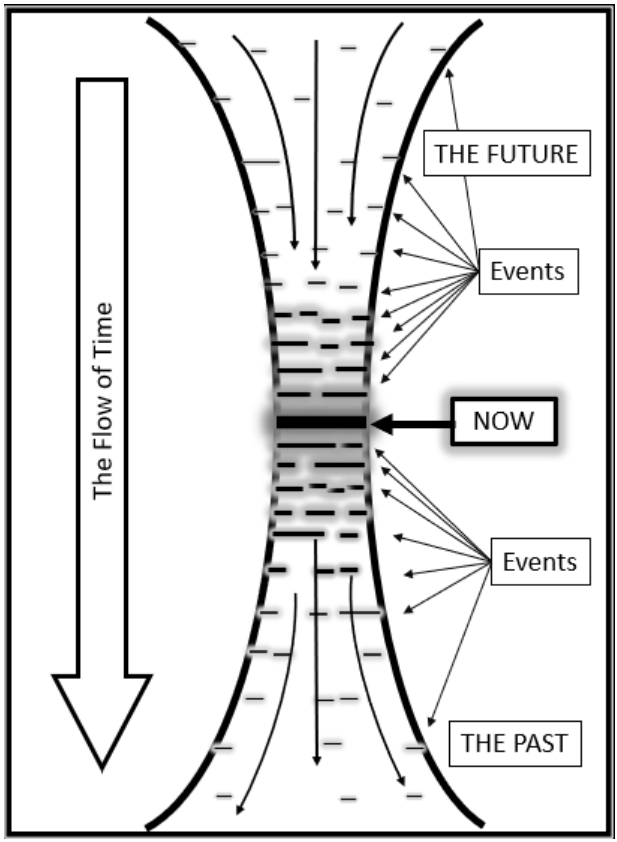


Events start out fragmented, unconnected. The farther the event is from the Now, the more broken up and fragmented it is. Meaning, the more distant an event is in the future, the more fragmented its energy is. Likewise, the more distant in the past an event is, the more broken up its energy is. As events loop around and re-approach the Now, they start to come together. Events are groupings of information packets or pearls, that coalesce or come together as they approach the Now.

The toroidal shape of time begins to squeeze the energy together as it begins its plunge down the funnel of the toroidal center. The constantly narrowing of the central column begins to pinch the energy and its resulting waves together. As events begin to group

together, the energies that make up its form it begins to, almost, mass. The otherwise loose collection of pearls or energy packets, pinch together onto a singular group. This grouped mass of energy is the event. It's a somewhat significant mass of information and energy, in time.

The zenith of this time pinch happens in the Now. The absolutely narrowest portion of the event's trip around the toroidal helix is in the very center. This very center, is the Now. You exist in the very center of your own personal toroid.



When things start to mass, they create their own vibrational energy. When the energies from an event begin to mass together and coalesce, it begins to, not just form up, it begins having an energy signature all its own. Fragments of this vibrating signature can rub or break off, and get carried downstream to the Now. It's almost like the smell of the event hitting you, before the event itself arrives.

The early warning, the forecasting shadow, of what's to come, may be received by you in different ways. You may be sensitive to the warning. You may ignore the feeling, and say to yourself, "it's not real". You may blow it off as just a hunch. Perhaps you'll act on that hunch. You feel an unexpected anxiety, uneasiness, or tension. You may have an unexplainable feeling of optimism. This is the result of your basal ganglia decoding the signal and sending it to the cortex for judgment, and action.

In some more extreme cases, it may be your cerebellum sending out the emergency warning to your medulla oblongata, which sends it down your spine, causing your hair to stand on edge. Your adrenalin may unexpectedly spike. Your sweat glands may open up. Your heart beat may unexpectedly start to speed up. Your pupils may begin to dilate. This is not a bad thing. It's most likely the appropriate response. This is your body's early warning and preparation instincts working exactly as they are supposed to.

Recent studies have shown this mechanism of early warning and the detection of future events in a more formalized science than I can offer.

November 26, 2025, Popular Mechanics published: "**Your Consciousness Can Jump Through Time—Meaning 'Gut Feelings' Are Memories From the Future, Scientists Say**". The article was written by Elizabeth Rayne. This article explores the idea of precognition through research by cognitive neuroscientist Dr. Julia Mossbridge (this story also references earlier work by Dr. Dean Radin. Credit where credit is due.) The core claim is that "gut feelings" or intuitive hunches might be faint memories or physiological echoes from future events. Your body and brain are responding before something happens, suggesting consciousness can access information non-locally across time.

The article cites other studies (including Radin's 1990s EEG experiments) that show brain/body reactions (e.g., heart rate or skin conductance changes) occurring seconds before a stimulus appears, especially for emotional/negative images. This is called "**presentiment**". Statistical evidence from dozens of replications suggests it's not random. Dr. Mossbridge argues time might not be strictly linear; consciousness could "jump" or glimpse future moments, explaining why gut feelings feel like foreknowledge.

There are a great many papers and books about the psychology of emotion affecting memory. But I want to focus on the more physical aspects. Time has physical components. Time has a physical construction. Time is actually made of materials, motion and energy. Time has chemistry. There are very few papers that apply this philosophy.

The best paper I've seen that even comes close to what I'm talking about, was published only very recently (only 7 days ago, from the time of this writing). The Reconnective Academy, which is a blog

synthesis of quantum research, published: **Quantum Retrocausality: Can the Future Influence the Past?** This piece discusses quantum retrocausality, or how the future affects the past, through delayed-choice experiments. This study links the changes it observes to emotional or conscious influences. It explores how present coherence, like emotional states, might retroactively shape past impacts. This paper blends physics with psi research. While it may not be peer-reviewed, it directly ties emotions to retrocausal effects. I honestly wouldn't expect any theory this radical or new, to ever pass the gatekeepers of the "mainstream" peer-review process. You can find articles like this and many others at: reconnectiveacademy.com/blog.

I am glad the Reconnective Academy mentioned *cohesion*, because that's how we end up dealing with time. If we want to change something, make a suggestion, attempt to manifest or adapt to what time brings, it's going to be through cohesion. We'll discuss the specifics of that process soon, in another chapter. First, let's talk about what it is, exactly, that we are changing.

We are perceiving and attempting to change energy. Before we can attack the enemy, we have to understand them. We already discussed how the body reads the incoming signal, and how that signal is created, but what does that specific signal look like? What, exactly, are we picking up on?

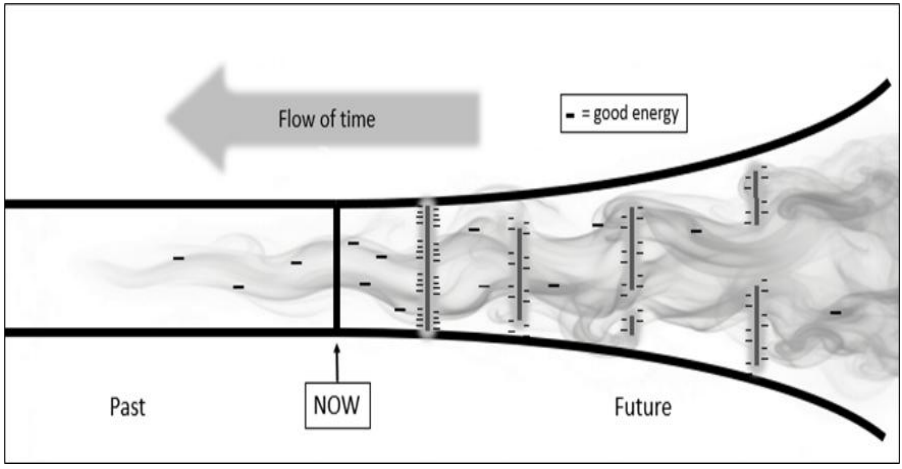
These *hints* of what's coming, can be thought of as smoke that precedes the fire. As the event approaches and begins to really coalesce or coagulate into its final form, it builds mass. As something builds mass, it begins to take on a vibration all its own. All those pearls of information coming together to form a singular vibration.

Like several different instruments in an orchestra, finally combining to create a grand song.

The downstream current of time pulls past the Now. The nearly completely formed event gets rubbed, and the downstream flow of time drags little bits of vibration off of the event as it passes by. This downstream current is rushing towards the Now. It's rushing to, over, and past you. Your antenna array picks up on the little bits of vibration that have been carried off by this current. They sense, analyze, and judge the incoming signals. If the fragments of energy are smooth and calm, it goes through the regular process of hippocampus or pineal gland, to the basal ganglia. After being processed by the basal ganglia, it then goes out the mailroom, the corpus callosum. Then it's out to the cortex for final review. The body then responds in a reasonable and regular fashion.

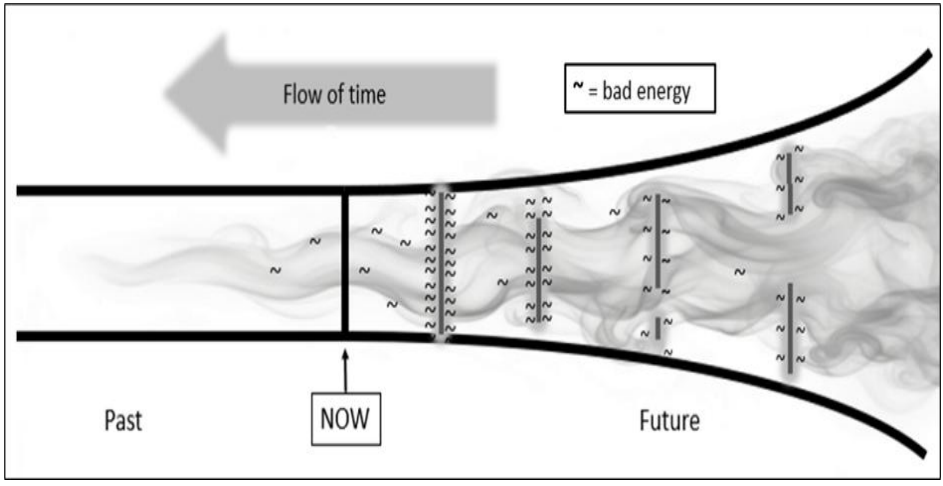
If the fragments of energy are chaotic and messy, like a total disaster is coming, the cerebellum will pick up on that, and send out the early warning via its quick response radio, to the medulla oblongata. This response to the broken and chaotic signal *hints* is the trigger for the cerebellum to short-cut the entire process and create an, instinct like, autonomic response.

Calm and normal *hints* are received, processed, judged, and responded to in routine fashion.



(Forgive me for using a sideways "timeline" orientation).

Rough, erratic, or chaotic *hints* are singled out, and instinct kicks in, with autonomic responses to the early warning.



Where there's smoke, there's fire.

The moment your antenna array picks up on one these energy fragments, that is the moment of "presentiment" that Dr. Julia Mossbridge was referring to.

The Universe, and time itself, is whispering to you, can you hear it? Do you want to whisper back? Believe it or not, it's listening. The heart's biomagnetic toroid, sending out vibrational signals and packets of information of your own, is how this happens. It's not drum circle, barefooted, wish upon a star, woo-woo, it's plasma physics. This is bioelectromagnetics, and neurocardiology meeting at the edge of what's measurable. The heart's field loops back into the cascade; the Earth's, the Sun, and Galactic toroids. This creates a bidirectional "echo" that shapes how we navigate and interpret the flow of events. It's how we influence time.

This influence happens via the heart's torus interacting with Earth's magnetosphere, using the same cyclical ULF waves, Pc pulsations, and Alfvén packets. Your heart's rhythms, or heart rate variability (HRV) encode emotional and intentional states as magnetic patterns. Coherent states, with smooth sine waves, broadcast "order". The non-coherent states produce chaotic, spiky waves or messy packets of outgoing information, it's more like you're broadcasting "noise."

These waves or patterns entrain with the next biggest toroid, Earth's magnetosphere. Your personal toroid is coupling with the next bigger toroid, like Schumann resonances and the recently discovered Pc1 "pearls" in Earth's magnetosphere. Studies show individual HRV syncing with geomagnetic fluctuations over minutes to days.

The Earth's field "echoes" back, via ionospheric bounces or Alfvén wave reflections, this results in modulating your local environment. Human collective fields have been known to influence the global magnetic field.

This means that focused coherence is pushing ULF, Pc pulsations, and Alfvén waves out into the world, and the world is responding. It's all signal in the plasma soup. One ripple does affect the next one. One wave does translate, into a change in the next wave. Measurable change occurs in Earth's magnetic toroid based on what human toroids are pushing out. The Earth then bounces that signal back. The modified and influenced vibration is returned to the sender.

The brain's antenna array triangulates these modulated signals, feeding processed data back to the heart via the vagus nerve. This results in a self-reinforcing cycle where your toroid "talks" to the planet's, which then talks back.

Talking to the planet is one thing, but it seems like talking to time itself would be another. But why should it be any different? Time exists in the same plasma soup that we all exist in. We just don't have a big rock, like Earth, to visually pin it to. But it's still there. Time is all around us, everywhere, all the time.

The exact same mechanisms apply. It's the exact same magnetohydrodynamic waves. It's the exact same Alfvén waves, Pc pulsations and pearls. And you use the exact same techniques to influence it. It's all about coherence.

Interaction, bottom-up

The Universe feels what you're putting out already. The Universe is talking back to you already. If you're paying attention, you can hear it. If you don't blow off the hunch, if you're paying attention to that 'gut feeling', then you're receiving the signal and responding already.

What I aim to help you do here, is improve your relationship with time. I want to help you clean up and strengthen the signal that you're putting out. This will also result in a side-effect; the volume on the incoming signal will increase too.

Heart Rate Variability (HRV) exercises are the key to you interacting with time. It's not a physically difficult exercise, but it does take some focus and some time (pun intended).

You'll want to get some equipment. People have probably done something similar to this, without any hardware, but that's akin to trying to plow a field with your boot heel. I'm sure someone's done it, but why. I'm not going to suggest that anyone should spend the next twelve years meditating in silent contemplation, to achieve what I think you can do in a couple weeks, with just a few minutes a day. You'll be able to get results, just by leveraging a little technology.

Starting out, it really helps to have a heart rate monitor and an app that can read that monitor. Many coherence apps have breath timers built into them, even the free ones. That's all you really need to start. That, and 5-10 minutes of quiet time in a comfortable place. That's all this is, it's a breathing exercise, while sitting quietly.

There's a lot of breathing apps, and different schools of thought about "*purposeful breathing*". I don't think any of them are wrong.

However, in my experience, nasal breathing is what brought me the best results. That just means: shut your mouth, and breathe through your nose.

The breathing is timed, in a regular rhythm. The duration of the in-breath usually matches duration of the out-breath. There is usually a pause at the top and then again at the bottom.

Some people like to do what's called box-breathing, which is very similar, but usually has longer pauses at the top and bottom, that match the duration of the in and out breaths.

Everyone may have slightly different preferences. Everybody is slightly different, and that's okay. That's the way it should be. The signal you're attempting to put out is uniquely yours. If someone has a different technique that doesn't work for you, that doesn't mean you're "doing it wrong". You're not trying to broadcast their message, you're broadcasting on your frequency, not theirs.

The key to making this work, is to keep at it. Your first few attempts at achieving measurable heart rate coherence, may not work very well. Don't give up. You'll find that in just a week or two you'll be able to achieve coherence quicker and then be able to hold it for longer. You are essentially, strengthening the neural pathways that make this exercise easier. The neural pathways in the brain, and the vagus nerve itself, are building additional structure on the pathways that you used to conduct this exercise. It's like, what we used to call "muscle memory".

You already have the existing pathway to do this exercise. It's hard-wired into the system. But it's probably not a well-traveled road. The physical path is there, but it's like an overgrown goat-path. When

you start doing HRV exercises routinely, that path gets more traffic. The brain immediately starts to reinforce that pathway. Soon, it's a single lane road, then it's a two-lane highway. With enough practice, it becomes a 12-lane superhighway, or a bullet train. With such a well-developed neural pathway, coherence isn't just easy it's second nature.

Don't worry about making some sort of special relationship with time right away. That will come in time. (Another time pun, I'm so sorry, I can't help it.) The initial goal is just to build the pathways that help you achieve coherence faster, and then hold it for longer. You may find this rewarding enough, all by itself.

When I first started doing HRV exercises, I thought I was achieving an "oxygen high". I wasn't sure how to explain it, but it felt good. It turns out that the good feeling is from neurochemistry. My brain was releasing Endorphins, Gamma-Aminobutyric Acid (GABA), Oxytocin, Dopamine, and Serotonin. At the same time, my brain was suppressing Cortisol, the stress hormone. This is the perfect cocktail of natural chemicals that make the world feel safer, time feel slower, and synchronicity feel closer. The vagus nerve acts like a quiet conductor, turning intention into biochemistry. My brain was rewarding me for making it feel good. Therefore, I felt good. Talk about a positive feedback loop.

HRV coherence shifts the body toward parasympathetic dominance, that's rest-and-digest mode, while boosting all the feel-good chemicals. It also simultaneously reduces stress hormones. The vagus nerve is the key highway for many of these changes, especially in HRV exercises.

Once you have a comfortable routine and have practiced HRV enough to slip into coherence relatively easily. You may consider attempting to pro-actively interact with time. Which *way* do you want to go? The future? Or the past?

It's in our nature to look forward. Let's start with the future.

The future is influenced by your intention. Intention is not wishing. Wishing is like hope thrown into the void, waiting for something else to make it real. In terms related to our context, intention is when you align your body's rhythms, your heart rate variability, your breathing, you engage your nervous system, all with a clear direction.

Intention is not a mental wish list; it's a physiological commitment. Your vagus nerve quiets the noise, your heart toroid strengthens, your brain waves sync. Suddenly the event stream doesn't just happen to you, it starts responding with you. Intention is coherence turned into a steering force.

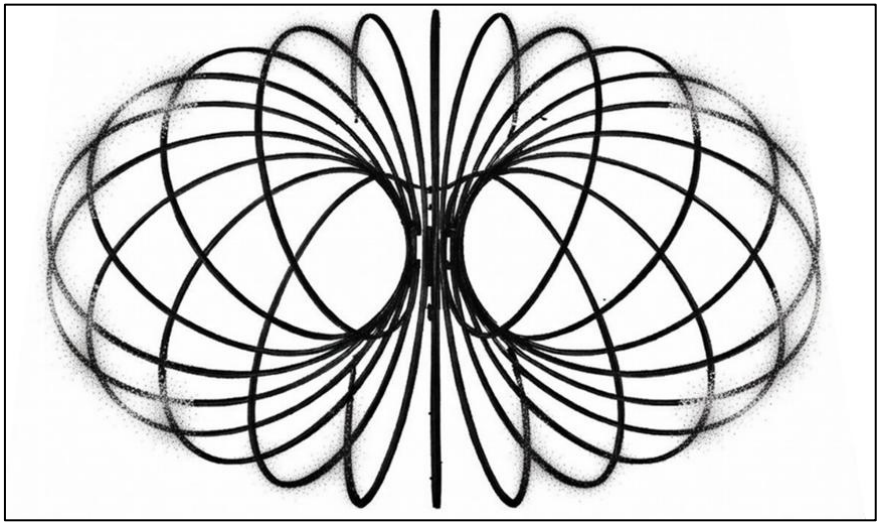
Intention is like a decision you back with your whole system: breath, heart rhythm, attention, posture, action. It produces a measurable vibration pattern that results from aligned neurochemistry. That neurochemistry is a result of heart-brain coherence.

Intention is what happens when you stop begging the Universe and start aligning with it. Wishing keeps you small, passive, waiting for permission. Intention is getting in sync with the vibrations that are all around you, and then influencing them with your own vibrations.

The results from your positive and 'can-do' attitude may not be felt right away. Everything takes *time*. And what you're doing here is building up your influence. It's not a light switch that simply changes

things immediately, as soon as you flick it. It's a suggestion; from the last chair, in the row of instruments, in a very large orchestra. Your immediate suggestion isn't going to change the whole band. But as you practice and get better, the suggestions will start to carry more weight. Your influence will slowly become more, influential.

What is it physically, that you are actually affecting? The energy, of events in time, are most susceptible to influence, when they are at the widest part of the arcing loop. They were solid when they happened. They started to break up as they descended down the path of the past. They continued to fragment as they got farther away. They then slowly started to re-coalesce as they began their journey through the future, back to the Now.

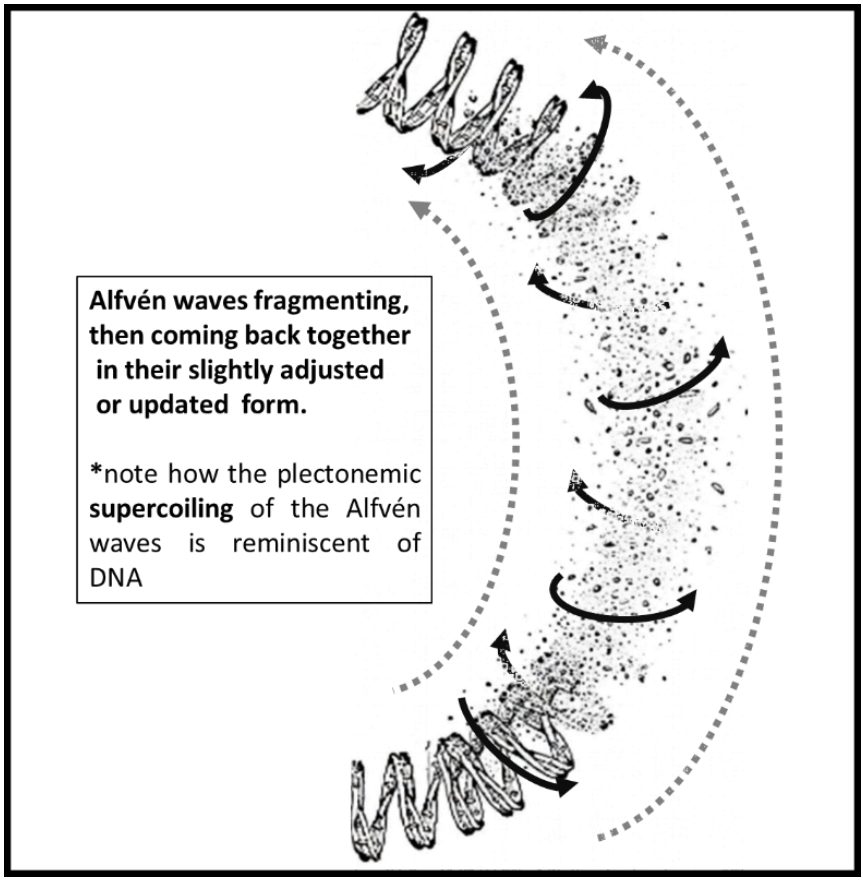


Intention, or focused, coherent attention, shapes the "coalescing" phase of the Pc wave cycle. The physical mechanism is: positive intention boosts heart coherence, creating a stable toroidal field that phase-locks with incoming ULF waves. This acts like a magnetic

interchange. It amplifies coherent gradients, making subtle future signals, synchronicities, or intuitive hits pop, in both the incoming triangulation and in the heart's output.

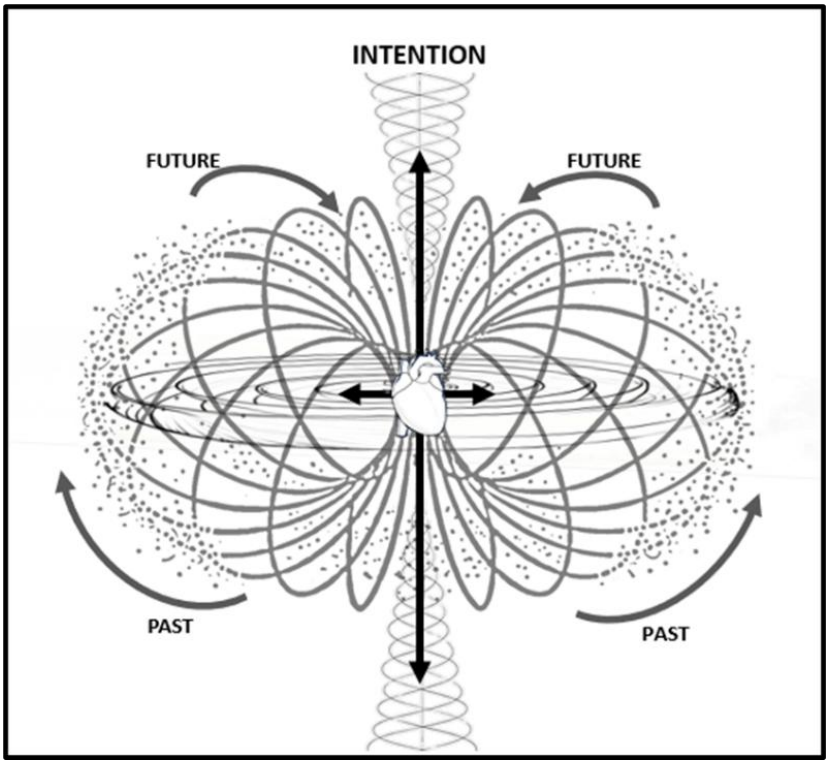
Your intention, in the form of energy, spreads out in the form of a wave that ripples out from the center, horizontally. This radial plane of energy, like the vinyl record of intention, is the magnetosonic waves, the MHD waves that carry information out to the outermost edges of the toroid. These magnetosonic waves (specifically the fast ones, which are compressional MHD waves) propagate perpendicular or obliquely to the field lines. This creates density and magnetic pressure ripples that radiate outward like sound waves in water. These can be excited by instabilities in the mid-plane, like magnetic reconnection or current sheet pinching. These MHD waves often convert from Alfvén waves when they hit density gradients. That means that they allow information to "leak" horizontally across the plane.

The field loops themselves, are the Alfvén waves traveling out, fragmenting, then coming back together in their slightly adjusted form. Alfvén waves primarily travel along the magnetic field lines of a toroid, following the looping paths without spreading too radially. think of them as vibrations along a string, circulating the donut shape and carrying energy and momentum efficiently with a little dissipation at the widest part of the arc.


Alfvén waves fragmenting, then coming back together in their slightly adjusted or updated form.
*note how the plectonemic supercoiling of the Alfvén waves is reminiscent of DNA

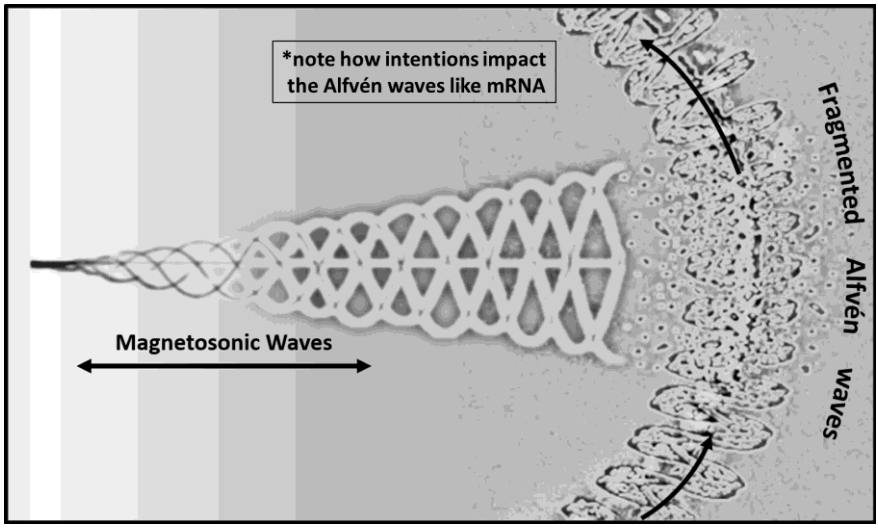
The system loves redundancy. There is a third outlet of your intention. The Alfvén waves make up the outer form of the toroid. The MHD waves fill the toroidal bubble, primarily in the equatorial center, with additional information. There is a pair of quasar-like jets spiraling out along the toroid's vertical axis. A combination of both Alfvén waves and MHD waves which spiral out the top and bottom of your personal toroid. These quasar jets are driven by helical instabilities or kink modes in the toroidal field. This is where Alfvén waves twist and amplify, ejecting plasma along the poles in a

collimated beam. This is similar to how quasar jets emerge from galactic cores in observable plasma cosmology. These aren't pure Alfvén waves alone. They are a hybrid of all the excess energy waves, compressed together and expunged together like a release of exhaust, from out of the center.



This too, is how intention is able to input new information into the event. The event has not finalized its formation yet. It's still susceptible to input. This is another way, to get in. This is how updates are added to an incoming event. If you want to change the future, this how you make suggestions. This is how you add notes to the sheet music of time. Your energy is making suggestions to the not yet finalized form of an incoming event's energy.

Your output of energy in the form of Alfvén waves, MHD waves, PC pulsations, geomagnetic ULF waves, and pearls has an effect on the Universe. It has an effect on the toroids of time. Your intention-suggestion is an energy wave in the plasma soup of existence. All these waves exist in the same plasma soup. Any wave that disturbs the plasma affects the whole soup. This is how you influence the future. It doesn't put you directly in the driver's seat, but it does give you the ability to suggest a detour.



This suggested detour of yours may not be taken the first time it's suggested, but with time, it's going to influence the route and eventually, the route changes. Thus, you have changed events in *time*. You've manipulated the future into something closer to what you want. If you felt like you were stuck in a doom loop, congratulations, you may have just broken the cycle.

Now, let's talk about the past. **Emotion influences the past**.

Emotions influence the past, in much the same way that intentions influence the future. This outflow of information happens on the 'bottom' of the toroid. It's a similar path of action to that which happens between your intention and the future, on the 'top' of your toroid. This emotional output starts in the center and flows outward and down.

The technique that is used to affect the past is identical to the one you used to make suggestions to the future. HRV exercises are how you sync up the heart with the brain, amplify your signal out, and tune in to the incoming hints of information.

The physical mechanism of this exchange is started in the heart. Emotions modulate the heart's field patterns. For example, gratitude creates smooth and ordered energies. Unresolved grief, negative feelings, and sorrow create chaotic, disruptive, and 'spiky' energy packets. This tags hippocampal memories via theta rhythms, or overlapping Pc waves. Coherent emotions, via vagus nerve feedback, get amplified. This disperses matching magnetic imprints, outward and downward, into the torus, which then causes the geomagnetic field to "echo" the emotional signal.

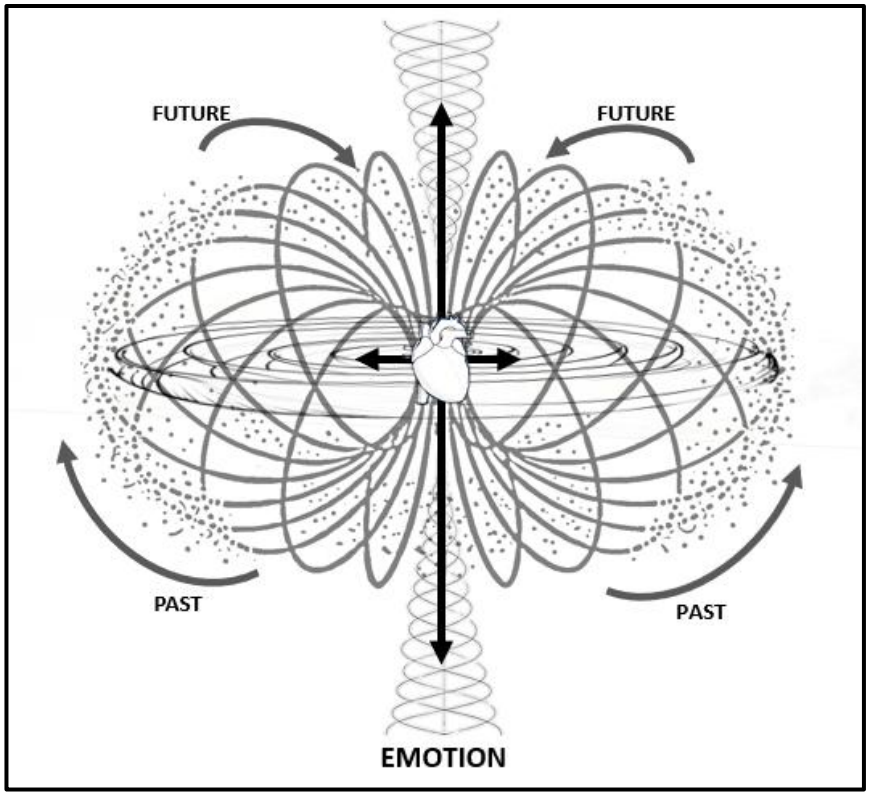
The toroidal loop, that has that particular event breaks up, and becomes more fragmented at its the outermost periphery. The solidness of past events, begin to break up and become more like; disorganized packets of energy. But they want to get back together. As they make the return trip, back to center, they start to clump together again. They attempt to return to their previous form. The event tries to reform back into its familiar form. The energy is trying

to reconstitute itself, back into its previous shape. The event, naturally, is trying to reconstitute itself. This is why things keep happening in the same way. This is the construct of the pattern.

You're not the only one creating input to the event. The entire Universe is pulsating with energy. This where the modern twist on old cycles happens. It's like a natural update. The 'newness of the now', from everywhere else, affects the event's energy too. This creates the modern version of the event.

Your emotions about an event in the past, broadcast their energy into your toroid, which then couples with the toroid of time. This may serve to reinforce the packets of energy of that particular event. It helps keep the energy coalesced longer. Your emotional output keeps the event more intact, and for longer. That means that your negative emotions about that event, help make that event, more of a recurring event.

If you're too emotional about a bad event in the past, your continued emotional focus on the bad feelings of that event, only serve to ensure that it happens again. It's like a negative feedback loop. The *doom loop*. This how history repeats itself. The patterns are real. You're not taking 'crazy pills', it really is happening, again.



The way to influence this to your advantage is, to let go. Let go of past trauma. You need to find a way to 'get over it'. I know that sound callous. I know that's easier said than done. However, you're going to have to reconsider some things about the past. You'll need to start looking at bad things from your past with more, or at least a different, perspective. You have to find, some positive aspect of the 'bad' past event, then focus on that more positive aspect of it. The calmer you are about the event, the calmer the energies you put out in regards to that event will be. Your emotional energy, will imprint on the fragments of that descending event, and suggest subtle changes. Those suggestions may take root and forever change the

event going forward. If you dwell on misery, the misery will persist. If you “make lemonade out of lemons”, the fruit may be sweeter next time around.

Positive emotions align with intention because it pulls your system forward. When you feel genuine appreciation, gratitude, or calm excitement, your heart rate variability rises, vagal tone strengthens, cortisol drops, oxytocin flows. The whole antenna array, the heart, the limbic-cortical loops, and the cerebellar relay, tunes to a higher signal-to-noise ratio. You’re not just thinking about what you want; your body is being physiologically organized towards it. Your breath slows, your attention narrows constructively, the Event Stream feels almost steerable.

But, of course, you’re not in fact directly “steering” it. You are influencing it. Your, diluting the incoming vibrations with the addition of your own vibrations. This is not magic or metaphysics. It’s just physics. The vibrations of your mental state coalesce with the surround vibrations, and they blend together. This is the coupling.

What you are really doing is building coherence with time. You start by building coherence with yourself, between your heart and your brain. You then extend that coherence between yourself and the world around you. That extended coherence is a coupling, between your mental state and your intentions, with the energy fields of time that are always present around you.

Your mental state is synchronous with your true intention. Your true intentions are what your toroid is broadcasting. It's not necessarily the words you say or the dialog that you have with yourself. This isn't simply 'affirmations', its intention. You're broadcasting vibrations, not a dialog.

The Universe can't hear your words. Your 'positive affirmations are for you, not the Universe. The Universe is responding to the vibrational energy that you emit, not the context of the dialog that you have with yourself. Your 'suggestions' have to be in the form of vibration, not vocabulary. The Universe doesn't speak your native tongue; it speaks in vibrations. So, you have to speak in vibrations in order to be heard. Those vibrations come, in part, from your neurochemistry. They are amplified by your coherence.

Your personal coherence exercise will improve the signal that your toroid is emitting. Your improved signal will affect the surrounding signals. Those surrounding signals will then flow back to your toroid. Then the "improved" signal will align more with what you were intending in the first place. It's a positive feedback loop.

Negative emotions align with wishing; it only pushes you backward. Wishing is like approaching the situation from a place of want, desperation, or need. Wishing is akin to incoherence. This lack of coherent chemistry is causing the negative vibration to be emitted, regardless of what you want. It's a negative feedback loop.

Fear, anger, resentment, or despair trigger sympathetic dominance. Your heart rate spikes, HRV collapses, cortisol floods, amygdala hijacks, and prefrontal clarity shuts down. You're not moving towards anything; you're bracing against loss, or replaying old pain.

The body stays stuck in a defensive loop, broadcasting the same old frequency. That's when the same old "this always happens to me", comes out. So naturally, the cascade keeps delivering more of the same. Wishing is negative emotion dressed up as hope. It's like desire without coherence. Whereas, coherence's resulting chemistry is like positive emotion, tuning time, like a piano, that's actively being played, while you tune it.

You can't change what has already been. If time were a piano that was out of tune, you can't rewind time and take back the notes that were already played. You can't travel back in time and change the outcome of what has already transpired. But those sour notes, or tough times, are going to come rolling back around. Those sour notes will be played again. By planting the *seeds of suggestion* into past events, you may see the fruits of change the next time it comes around. You're tuning the piano while it's still being played. So, the next time that particular key gets played, it's more in tune with what you want to hear. You're literally 'coherence coupling' in order to; tune up time.

I understand if this all seems a little woo-woo to you. Even I think that I sound a bit like: some gushy, positive attitude, life-coach. I don't mean to. I don't intend to sound like the 'good idea fairy'.

I'm trying to convey, in a relatable manner, what's already known in regards to plasma physics, modern science, and how I think it relates to time. That may best be done with mathematics. There is real science behind all this feel-good stuff. There is real mathematics behind the interaction between your toroidal field and that of the Universe or time.

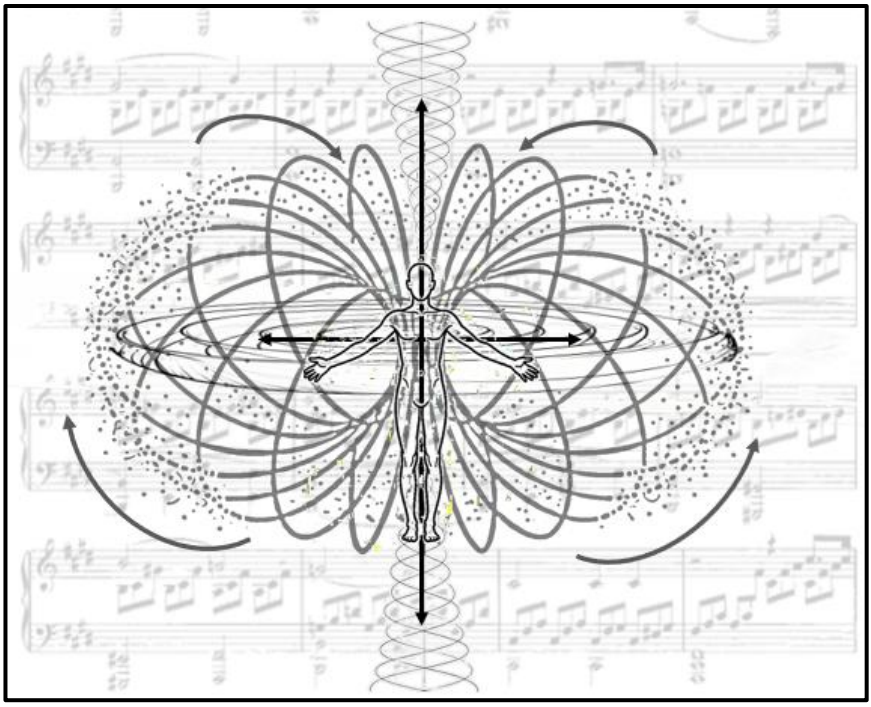
Here's what it looks like:

$\Delta\Phi\_time = \nabla(\Psi\_intent - \Psi\_emotion) \cdot C\_h$

Φ_personal = your own felt experience of time
∇ = gradient = the directional difference
Ψ_intent = intention energy
Ψ_emotion = emotion energy
C_h = heart coherence

I have purposely left out the longer discussion about mathematics from the main text of this book. I have an appendix in the back of the book specifically to address the mathematics. If you're wanting to check my numbers, I invite you to check out the math appendix. I put it there, specifically for you.

A main point that I'd like to emphasize is that; the exercises required to conduct HRV will change your neurochemistry in such a way as to reduce stress, enhance calm, and provide a tangible positive feedback loop.
The conduct of HRV promotes the output of positive signals, thus; effecting the future, the past, and your neural present. Like I said; the system loves redundancy.



So, What?

“If wishes were candy and nuts, we’d all have a very Merry Christmas."

I don’t want you to leave here thinking that this just about hoping that things turn out better, while nose breathing.

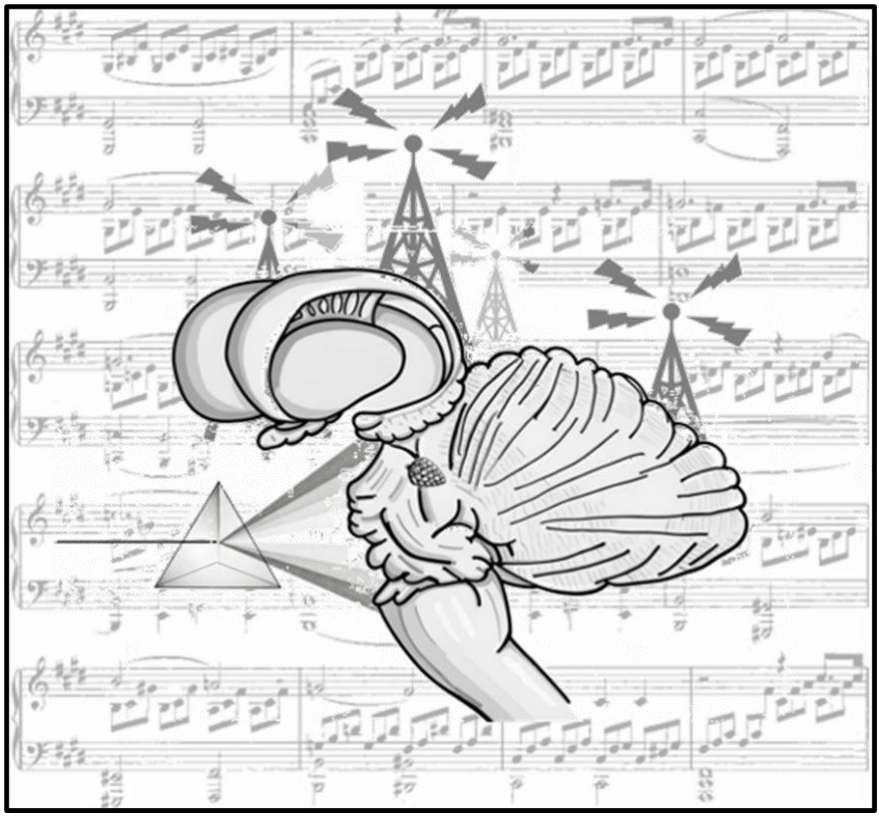
Hope is simply desire. Desire without action is just fantasy. This is a call to action. I’m suggesting that you take action for yourself. You can influence time. You can edit your own future.

You may want to think of it as tossing pebbles in a small stream. One pebble, here or there, may not produce a large change in the downhill flow of that stream. You may not be able to see the changes that one stone caused in the undersurface currents. The little eddies, the ripples, the minor adjustment of displacement, all happened with the addition of that one little stone. The addition of that stone did cause minor changes in the way the water moved, in at least one little section of the stream. Over time, those little stones build up. The river will eventually have to change course. With enough practice and enough changes (enough stones) you’ll change the map. The river will begin taking the form that you dictated it take. Time will continue to flow, unrelentingly downhill, it’s just the nature of things.

You can’t stop time; it will continue to move and flow downhill, like the river. Even if you could dam up a little section. It would flow around your dam, build up and overflow, or simply saturate and breakthrough. So, while you can’t stop it, you can modify the course

in which it takes. You can modify the course, in a way that works to your personal benefit. One stone at a time.

This technique of throwing stones in the stream is done through coherence. That's how you amplify your signal. With practice, the stones get bigger. Your technique and time manipulation skills will improve. The way you experience time will change, as you'll also be receiving signals that may have been missed before. The receiver in your brain will be more finely tuned. You'll simply hear more of the song that the Universe is playing, than you did before.



What does this have to do with the price of tea in China? Well, everything. Everything and nothing. Using the obscure example of the Chinese marketplace, in terms of agriculture, regarding a specific crop, is odd. But I'll do it anyway. No, you probably won't notice a large change the weather patterns over central China that could affect crop production, or the health of tea bushes. Nor will you notice your intentions making much of a difference in the financial decisions of the Chinese government's agricultural department. But you didn't see the minor eddies under the surface the stream, when you threw your first pebble in the river, did you? If the price of tea in China is so important to you, then keep working on it. Keep your focus on the prize. Keep adding your little suggestions. Your intention-suggestions will build up. Your suggestions will, inevitably, become more focused on specific details or elements of the tea industry. The stones will start to build up beneath the surface. Water displacement will begin to occur. Eventually your suggestions will have forever changed something in that industry, and you will have changed the price of tea in China.

Does this help me in my daily life? Yes, definitely. Not only are you adding suggestions to the toroid of time, that will, no doubt, benefit you in the long run. You're engaging in a routine that changes your neurochemistry. These neurochemistry changes affect you in a positive manner. Your outlook on life will be more optimistic. Your stress levels will be lower. Anxiety won't be a common thing in your life anymore. Hindsight and perspective become your daily reflection. You'll hear hints from the future. The heads-up call from the brain, will be heard clearer. The gut feelings you'll get, will give you a head-start on things that are coming your way. Does this affect your daily life? Yes, in ways you can't imagine yet.

Does this put food on the table? Maybe. If it's groceries that have your focus. Then, truly, focus on it. How do you acquire food now? Does it come from a grocery store? Does it come from a farmer's market? Are you a farmer yourself? Are you a hunter-gatherer? If it's putting food on the table then, you should focus your intentions on the specific ways that happens. Think about the lean times before. Process the emotions you had the last time you were really hungry. Re-imagine what that was like, and then find some positive perspective on those events. Remember, you can affect the looping flow of time in multiple ways. Your emotions affect the downstream flow events, and your intentions affect the upstream events. In the end, they are the same stream. If you're really focused on groceries, attack the problem from both directions.

Does this pay my bills? Possibly. Money is a common worry amongst people in Western cultures. If your sole concern is financial, then first thing I'd say is that you've fallen into a trap. Monetary wealth is handy when you want to buy things. Money is certainly a way to establish peace of mind, as an abundance in a resource, like money, does give the illusion of security. If it's security you're worried about, then I definitely suggest using coherence to increase your awareness about incoming events. If it's the greed of just wanting 'more', then focus on the ways you acquire wealth. Is it a job, a personal business, a partnership of mutual benefit? Find the details that truly matter to your business and focus on those. And don't forget to think about the events in the past that may have caused hard times. Your perspective and changes in emotion memory can get an early start on changing events that may affect you financially in the future.

However, I think that as you participate in this exercise, you'll probably gain some perspective that could modify the way you perceive the illusion of security, that may come from the numbers in your bank account. It's entirely possible that in your attempts to talk to time, the Universe will talk back, making a few suggestions of its own. Those suggestions may change the way you think about 'wealth'.

Does this bring back my lost loved one? No. No, it certainly does not. It doesn't change the past. It changes the way you deal with the past. The actual changes that may occur in the past, downstream, don't get felt by you until that particular event energy rolls back around. If you've done your homework, then *it* may be better, *it* may land softer, *it* may not be as bad. There's only one way to change things, and that is to suggest to the Universe, that *it* should be different; next time. Not wishing *it* to be better, instead, think of it as: feeling better about *it.*

Of course, sometimes bad things happen to good people. They always have, and they still will, but I'm suggesting that you can reduce the impact of those bad things. You can, maybe, take the edge off a little. You can reduce the frequency of the bad things that will inevitably, happen. And perhaps more importantly, you change the way you react to the rotten things. I'm sorry, but bad things will, still, occasionally, and inevitably happen.

I'm not suggesting that you should put on a fake smile and look at the world thru your rose-tinted glasses. But I would to suggest that you, maybe, take Monty Pythons advice and "Always look at the bright side of life".

Bottom line: So what? Take action. Take control. Get involved in time. This isn't hoping. This isn't wishing.

Wishing is a fantasy dressed up as hope. Nothing moves. Nothing changes. Wishing is hoping for a gift. Intention is active. True intention is emitted through your toroidal vibration, which is directly affected by your neurochemistry. HRV is the gateway to better neurochemistry, better neurochemistry aligns with better vibrations. Expanding that coherence beyond your own toroid and into a coupling with time. Your coherence, coupled with times toroid, produces more aligned vibrations, back to you. You are, in fact, building coherence with not just yourself, but with time. Your coupling coherence.

"If wishes were horses, beggars would ride.
If turnips were watches, I'd wear one by my side.
If 'ifs' and 'ands' were pots and pans,
There'd be no work for tinkers' hands."

Sounds Familiar

You might be thinking, this sounds a lot like **manifestation**. Well, it is. This is absolutely in line with manifestation. Manifestation has been taught for centuries, if not thousands of years. It is an idea that just never died. Now you know what it is, scientifically. More importantly, you know how to participate. Understanding how time works is the key to improving your manifestation skills. HRV is essentially, the short-cut to manifestation.

Perhaps you've heard of **Karma**. Where do you think that comes from? Karma is cyclical. What you put out, comes right back to you. I've heard of Karma being described as a trampoline or a mirror, reflecting back what you put out there, it bounces right back to you. Those are nice analogies, frankly, I like them. But now you know the actual scientific mechanism that makes Karma happen. The Alfvén waves, MHD waves, Pc pulsations, and ULF waves that you put out there, get absorbed, and then carried right back to you. You get what you give. If you're putting out negative vibes, you receive negative vibes. Turns out, the hippies weren't wrong.

The Emerald Tablets of Thoth, or Hermes Trigumestas, may be modern in origin. As there is no record of the physical document ever existing. Regardless, they echo ancient wisdom through their focus on cycles, vibration, and mastery over time. Thoth describes reality as nested spirals and wheels within wheels. In this alleged document, consciousness can transcend linear time by aligning with higher 'Light' and it suggests that you can break free from repeating loops. This mirrors my theory on time being nested in toroids: toroids within toroids, event streams that can be influenced,

through embodied intention and coherence. The tablets urge looking inward to the heart for the source of all knowledge. This is a perfect parallel to the heart's magnetic toroid as a primary element in our cascade. While the Emerald Tablets may or may not be historical fact, the symbolic resonance is striking.

The Secret was a 2006 self-help book and documentary film created by Rhonda Byrne. I think it deserves mention, as it popularized the **Law of Attraction**, to a great many people. The law of attraction, as described by Rhonda, is the idea that positive or negative thoughts bring positive or negative experiences into a person's life. She illustrates the idea through a mix of interviews, anecdotes, and spiritual, even quasi-quantum-inspired explanations.

Her primary theme was that your thoughts and emotions are magnetic. What you focus on, with feeling, is what you attract. If you visualize what you want, feel it as if it's already real, and the universe will respond by matching your vibration. That's basically the same thing that I'm trying to convey.

However, Rhonda tends to lean on the metaphysical "universe as genie" thing. Despite this more fanciful, magic like, wishing aspect, our theories are extremely close. Our theories have more similarities than differences. Our theories have many important parallels, like: Intention and Emotion as steering forces, vibrational matching, and *The Secret* implies that once you're aligned, things arrive. There is, but a hair's width, between our theories.

You may be thinking that this sounds like **Meditation**. And you're right. It does. Meditation, at its simplest, is the deliberate practice of returning attention to the present moment. This is usually done

through the breath, body sensations, or by picking a chosen focus point, while gently letting thoughts and distractions pass without getting caught in them. This is an ancient technique. Across many traditions, including ancient Vedic and Buddhist ideologies, even the newer methods that lean into modern secular mindfulness, their goal is the same. The idea is to quiet the mind's chatter, reduce reactivity, and cultivate a steady, open awareness.

When this is done consistently, meditation shifts the body's physiology: heart rate variability increases, vagal tone strengthens, stress hormones like cortisol drop, and feel-good chemicals like endorphins, serotonin, and oxytocin, all rise. This identical to what happens to the brain during HRV exercises. It's the same neurochemistry. It's very similar techniques; it's just got a different name.

Like meditation, HRV is the primary tool for tuning your antenna array. Slow, rhythmic breathing syncs the heart and brain toroids with the incoming cascade, the cerebellum stays alert for early signals, the limbic-cortical loops open to receive clearer event packets, and the basal ganglia begin interpreting them. HRV is not about emptying the mind or escaping reality. We are doing HRV to fine tune our brain's receiver and to make suggestions that affect both, the past and the future; resulting in a modulation in time. This practice of HRV with the intent on editing time, is intended to remain neutral and factual, without over-spiritualizing anything. It also has the side-effect of generating a generally good feeling.

You may be thinking that this sounds a lot like **Prayer**. And you're right, it does. Both prayer and the kind of intentional heart-focused breathing that we are talking about are ancient. They are both

universal human practices that seek to align the individual with something larger than themselves. They may differ in language and tradition, yet they overlap in some surprisingly deep ways.

Prayer is often a directed turning of the heart and mind towards the divine, a higher power, or a greater good. Prayer is usually asking, giving thanks, seeking guidance, or simply resting in connection. HRV coherence is also an act of directed intention. In HRV you consciously choose to slow your breath, focus on the heart area, and cultivate a feeling of appreciation or calm. In both cases, the practitioner is saying, "I am choosing to align myself right now."

It's my understanding that when people pray, with genuine feeling (especially prayers of gratitude, surrender, or love) then scientific research consistently shows: the same physiological shifts that we see in HRV coherence. The heart rate variability increases, vagal tone strengthens, cortisol drops, and the nervous system moves into a parasympathetic state. Many people report that heartfelt prayer "feels" coherent in the body, just as slow, rhythmic breathing does.

Nothing in what I'm suggesting requires anyone to abandon prayer or their faith. If prayer already brings you into a state of heart coherence, emotional openness, and alignment with a larger rhythm, then it is already doing much of the same work. It may even work more deeply for those who experience prayer as communion with the divine. The tools I've discussed are simply one way to enter that same state deliberately and reproducibly, whether someone approaches it through science, spirit, or both.

In the end, both prayer and HRV coherence are ways of saying "yes" to life with the whole body and heart. One speaks in the language of

faith and devotion; the other speaks in the language of rhythm and physiology. When the heart is open and the mind is quiet, they often arrive at the same place. You may have a sense that we are not separate from the flow of things, and that something larger is moving with us.

You may make the comparison between this time focused HRV practice and prayer, and find yourself thinking; this sounds a lot like **Quakerism**. And again, you'd be, at least partially, correct.

If you're not familiar with Quakerism, Quakerism is a Christian-rooted spiritual movement that began in 17th-century England, under George Fox. Quakerism teaches direct, personal experience of the divine, instead of formal creeds, clergy, or ritual. Basically, the premise being, that one doesn't need a fancy church or formal priest to access their relationship with the divine.

In the Quaker practice, belief in the "Inner Light" or "that of God in everyone", serves as a direct connection to a higher power. Meaning divine guidance is available to all people, at all times. This is accessed through stillness, silent waiting, and listening. Friends gather in silence, speaking only when moved by the Spirit. This quiet, expectant waiting often brings physiological calm, emotional clarity, and a sense of alignment.

This silent worship could be seen as a natural, embodied way of tuning the antenna array. The heart settles into coherence, the mind quiets, the nervous system shifts toward parasympathetic openness, and the individual becomes receptive to the subtle rhythms of the cascade.

A key difference is that no effort is made to "steer" outcomes. Quakers, often called *Friends*, seek to align inwardly, so they can better discern and follow the guidance already present. Their practice is less about doing and more about becoming still enough to hear. However, the neurochemical and physiological response is identical, biologically speaking.

Maybe you're thinking this sound like **Gnosticism**, or even **Catharism**. Again, you're not far off. There are some differences. But there are also a few similarities.

Gnosticism refers to a fairly diverse family of ancient spiritual movements. They existed primarily in the 1st–4th centuries CE. The Cathars were in southern France and northern Italy during the 12th–14th centuries. Cathars, and most Gnostics, felt that personal, direct knowledge (gnosis) of the divine, was the path to liberation, rather than ritual, or any external authority, like a church or some type of special temple. This is also, much like Quakerism.

One major difference is that Gnostic teachings often portrayed the 'material world' as flawed or illusory, created by a lesser deity, rather than the true, transcendent God. In their teachings, the human soul, was seen as a divine spark trapped in matter. They believed that this 'spark' could awaken through inner revelation, self-knowledge, and could then ascend beyond the flawed physical illusion to reunite with the ultimate divine source.

Gnostics leaned heavily on what we now call Dualism. They separated existence into two worlds. They didn't meditate, per se, but they would often engage in silent contemplation. This meditation like contemplation, was an inward focus on the divine

spark within. It was usually conducted in solitude, or in group silence. This was intended to quiet their mind and perceive higher realms. This resembles the breath-focused stillness that we look for in HRV practices. It is designed to encourage a state of inner alignment and detachment from distractions. A practice like this will have the same neurological effects that we see with HRV. The focus might have been different, but the physical practice was similar. No doubt, the physiological effects were also very similar.

I'm sure you've thought that this sounds a lot like **Buddhism**. And you're not wrong. It is very similar. Buddhism was founded in India around the 5th–4th century BCE. Buddhism teaches that suffering comes from craving, ignorance, and attachment to impermanent things. It also teaches and that liberation, or *nirvana*, comes through direct insight into the true nature of reality. To achieve this insight, one must follow the *Noble Eightfold Path*, which includes, among other things, mindfulness and concentration. Some of Buddhism's core practices include: breath-focused meditation and insight meditation. Does that sound familiar?

While it may not have been their true intent, Buddhist meditation could be a powerful way of tuning your body's antenna array. By returning attention to the breath and body, the practitioner quiets mental noise, strengthens heart coherence, vagal tone increases. It's the exact same formula, for the exact same neurochemistry. Are you seeing the pattern?

If you didn't consider Buddhism, maybe your mind jumped straight to **Daoism**. You're still on track. This theory has numerous things in common with Daoism, too. It also has some distinct differences. Daoism is rooted in ancient Chinese texts from the 4th–3rd century

BCE. Daoism centers on the concept of living in effortless harmony with the *Dao*. The *Dao* is described as "the ineffable, natural way or current that underlies all things". It emphasizes non-action or action without force, simplicity, spontaneity, and it encourages one to align with the natural rhythms of *yin and yang* rather than controlling outcomes. And that's where we find our differences. We, trying to edit time. We are striving to make changes. We are definitely trying to influence the outcome. While Daoism is more akin to just letting things be, we are actively trying to affect change.

Core practices in Daoism include breath cultivation and meditation on emptiness. The Daoist practice is almost a direct mirror of coherence training. By slowing the breath and surrendering to the natural flow, one becomes a clear conduit for the Dao. In practicing HRV techniques, you are returning your attention to the breath and body. The HRV practitioner quiets the mental noise, strengthens heart coherence, and as a result, vagal tone increases. It's the exact same formula, for the exact same neurochemistry. Tell me that you are seeing this pattern too.

You may have heard of **Flow** or being "in the **Zone**". And you realize that it's very similar to what I'm describing. If so, then you are, once again, absolutely right.

Mihaly Csikszentmihalyi, the psychologist who first named and mapped the flow state in the 1970s, described it as a moment of complete absorption where time transforms, *self* vanishes, and everything just clicks. His work showed that flow happens when challenge matches skill, goals are clear, and feedback is immediate. This inevitably leads not just to deep enjoyment, but also peak

performance. Csikszentmihalyi saw flow as a *psychological sweet spot*.

More recently, Steven Kotler has picked up the mantle and truly advanced the science of Flow. Kotler took Csikszentmihalyi's foundation and turned it towards extreme performance.

Steven Kotler and the Flow Research Collective have mapped the state of Flow better than, probably, anyone. Their work on triggers, neurochemistry, and high-performance psychology is brilliant and practical. (He's also a much better writer than I.)

My theory doesn't contradict this. I think the theory of magnetic time toroids actually expands the works done by these brilliant individuals. Where Kotler shows how to get into Flow through challenge-skill balance and deep focus, I am attempting to explain how a very similar process can allow you access to the *code of time* and then suggest changes. When your heart toroid coheres, your nervous system aligns, and your brain's antenna array tunes to the incoming rhythm, you're not just entering a brain state, you're syncing with the same magnetic current that moves galaxies, planets, and time.

Kotler does an excellent job of laying out a 'how-to manual' for the Flow state. My theory is intended to tell you how it relates to time itself. I feel that both of these approaches lead one to experiencing time differently. And the Universe itself will respond when we finally match its frequency. When your heart toroid coheres, your nervous system aligns, and intention locks in, the event stream doesn't just feel better, it actually starts responding.

Depending on how diverse your library is, you may have heard of an old book called: **The Secret Teachings of All Ages:** *An Encyclopedic Outline of Masonic, Hermetic, Qabbalistic and Rosicrucian Symbolical Philosophy*. This massive text was written by Manly P. Hall. It was first published in 1928. If you're familiar with this work, then you probably see the parallels between all these ancient concepts and what I've described here. And again, you're not wrong.

In that book, Hall covers dozens of ancient and occult systems. Ranging from Egyptian mysteries, Greek philosophy, Hermeticism, Kabbalah, Rosicrucianism, Pythagoreanism, Eastern mysticism, astrology, and numerology. He even dives into Atlantis lore. Hall presents them as interconnected pieces of a single "perennial philosophy" or a secret form of wisdom and tradition.

Hall describes reality as layered, cyclical, and symbolic, sort of like wheels within wheels, emanations from the *One*, spirals of descent and ascent. He outlines hidden patterns repeating across the scales of time. This really does mirror the nested toroids that make up the magnetic cascade. It mirrors the physical construct of time. Its larger structures, enclosing smaller ones, time as repeating loops, that you can navigate, influence, or potentially manipulate.

This stuff has been preached, taught and practiced for centuries. My theory is not novel, it's not "new"; it's just being reframed. It's being proven by science.

I didn't invent something new here. I have redefined something old.

The breathing techniques that are presented in the appendixes, at the back of this book, aren't of my own design. They are something

that someone else has shown me. And those techniques are copied, or modified, from ancient texts and practices themselves.

I didn't come up with the idea of synchronicity. Nature owns the copyright to synchronicity. Just as it owns the copyright on the Fibonacci sequence. We are simply pulling back the covers, applying modern science, and re-discovering it.

Rhonda Byrne was 'spot on' with her dramatic analysis. It *is* the oldest secret. The secret of secrets. It's the way that we interact with time. It's the way that we interact with the Universe. And we can decide how, exactly, we chose to interact with them. We always could, that's the secret.

Discovering time is like discovering math. It was already there; we just came up with the words and the numbers to help explain it. We didn't invent it. We revealed what was in front of us, the whole *time*.

Afterwords, Life after life

This chapter serves as a sort of; Afterwords. It's a collection of additional thoughts and implications that have resulted in the course of my studies on the toroids of time.

First things first, Light. Can you actually see time? No, you cannot. But you might be able to see one of the byproducts of the engine that keeps time moving. A faint, coherent light field, made of biophotons, is emitted by every cell, and it is organized by the same toroidal magnetic patterns that drive the cascade.

Some call it an **Aura**; some may simply call it a glow. Either way, it's real, measurable, and it's stronger when the system is coherent. Think of it like this: The cell is an engine, it does work. That engine emits exhaust. The exhaust is so small, that's basically a photon, with barely any mass at all. When you add up the billions or trillions of cells together, all those little photons start to show up as emitted light.

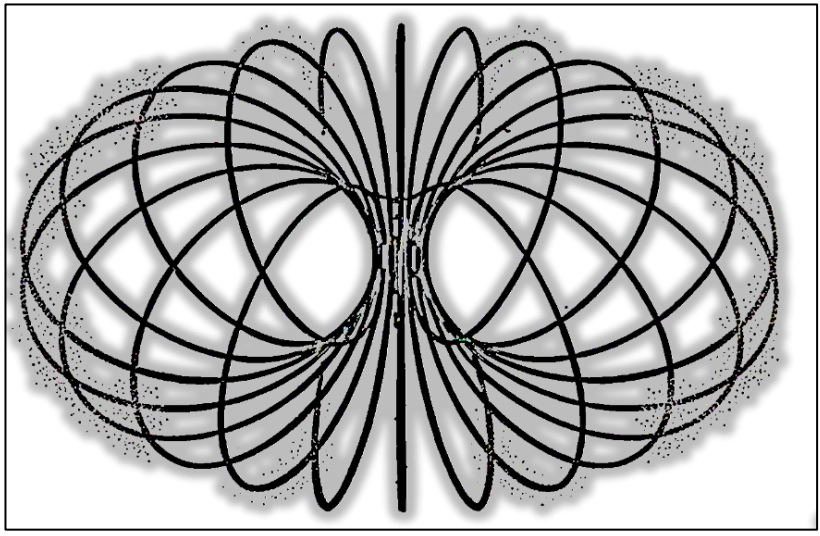
Every cell in your body is quietly emitting a faint glow of light. Biophotons are a natural byproduct of mitochondrial activity. These tiny emissions, organized by the nested magnetic toroids of your heart and brain, may create the subtle light field some people perceive as an 'Aura.' When your system is coherent, that field becomes stronger and more organized. The same toroidal principle that governs the cosmos appears to be at work inside you, turning your biology into a living, light-emitting antenna.

Recent studies (e.g., Popp et al. 1980s–2000s; Van Wijk et al. 2000s–2020s; and even more recent 2025 mouse whole-body imaging by

Oblak et al.) show this emission is coherent, non-thermal, and modulated by cellular states, like health, stress, and coherence. The glow fades rapidly after death, confirming it's tied to living metabolism.

These photons are in the UV-visible-near-IR range (~200–800 nm), with intensities around 10–100 photons per second per cm^2 — far too faint for the naked eye, but detectable with photomultipliers or CCD cameras.

Some researchers in biophotonics and weak-field biology propose that this photon field forms a faint, dynamic "light halo" around the body. This is the scientific basis for what some call an aura. It's not colorful like Kirlian photos, which are actually just corona discharge artifacts, but it is a subtle, uniform emission that appears as a glow to sensitive observers.



Does this scale up? Yes, it does, beautifully. At the cellular level, mitochondrial toroids emit photons. At the human body level, the

heart and brain toroids organize and modulate those photons via magnetic fields. The integrated magnetic cascade, heart toroid enveloping the brain, brain toroids modulating cellular fields, creates a coherent, whole-body photon emission pattern, the "Aura".

Here's where it gets even more interesting. **Earth has an "Aura" too.** The Earth is surrounded by a dynamic, glowing plasma envelope that extends far beyond the atmosphere. In the Plasmasphere, a doughnut-shaped region of cold, dense plasma (mostly H^+ and He^+ ions + electrons) are trapped by Earth's magnetic field, extending from ~1,000–20,000 km altitude. It literally looks like a toroidal glow in certain wavelengths when imaged from space.

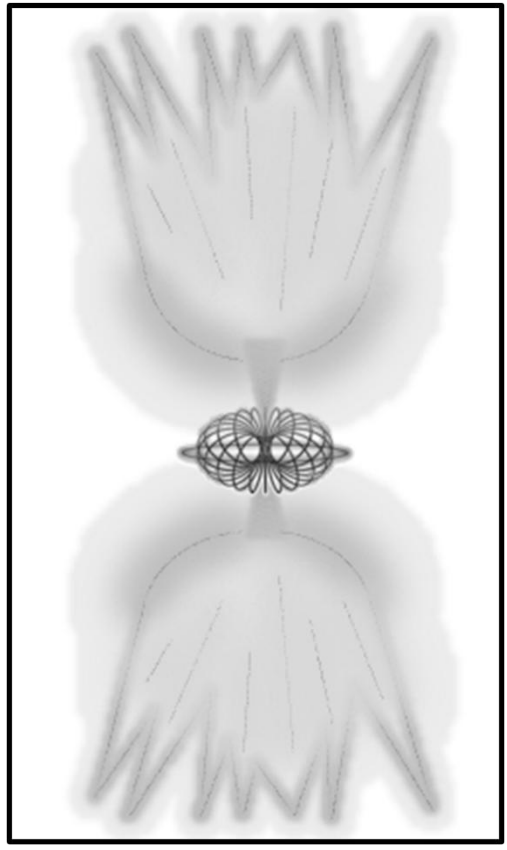
Earth also has what's commonly called an *airglow.* This is a faint, global emission layer, at about ~80–100 km altitude. This airglow blankets the entire planet day and night. It's caused by recombination of ions and atoms in the ionosphere. Essentially, it's a steady, diffuse photon emission from the upper atmosphere. NASA satellites routinely image this as a soft, planet-wide halo.

At the cosmic level, the same principle repeats. The Milky Way galaxy has a very real, multi-layered "Aura" in the same physical sense as the human body and the Earth does. The galaxy has a dynamic, glowing plasma envelope shaped by its toroidal magnetic fields and current systems. The entire Milky Way galaxy is surrounded by a vast, diffuse plasma halo that extends far beyond the visible disk. It's a glowing, ionized gas layer that emits light across multiple wavelengths.

The Milky Way's Aura includes multiple components. There is the Halo Plasma Glow (HPG). The HPG is a galactic halo that contains hot, low-density plasma (~10^6 K) extending ~100–200 kpc from the center. It emits X-rays from hot gases and faint optical/UV lines from ionized hydrogen and other heavier elements. Chandra, XMM-Newton, and eROSITA telescopes routinely image this halo as a soft, extended glow enveloping the entire galactic disk. It's a galaxy-scale "aura."

There are also radio and synchrotron emissions. The HPG produces strong synchrotron radiation, that's radio to gamma rays, from relativistic electrons spiraling in the galactic magnetic field. This creates a diffuse, polarized radio halo that looks like a glowing cocoon around the galactic disk.

I would be remiss if I didn't mention the "Fermi Bubbles". These are two enormous, hourglass-shaped gamma-ray structures. They extend ~25,000 *light-years* above and below the galactic plane. These are plasma lobes filled with hot, magnetized gas and relativistic particles. They too emit a faint light signature.



Plasma toroids, cellular, personal, planetary, solar, and galactic, all emit and organize photons along their field lines and equatorial planes. So, you can't 'see' time. But you can see the exhaust fumes from its engine.

Toroidal replication, it is a thing. Toroids in plasma physics do self-replicate, "spawn," or "bud" new toroids in multiple well-documented ways across lab experiments, simulations, and astrophysical observations. Eternal, current-driven recycling and reproduction happens at every scale. This isn't fringe speculation; it's observed behavior in high-current plasma systems.

Plasmoid budding in Z-Pinch and laboratory toroids exhibit Direct Self-Replication. In several high-current z-pinch experiments and tokamak disruptions, a primary plasmoid, or toroidal plasma ball, forms from magnetic compression. When current density gets high enough, instabilities, kink, sausage, or Rayleigh-Taylor-like, cause the primary plasmoid to bud off daughter plasmoids. These are smaller toroidal structures that pinch off and become independent.

PPPL Magnetic Reconnection Experiment (MRX) and similar devices show plasmoid-dominated reconnection. Elongated current sheets fragment into chains of plasmoids that then *evolve* into separate toroidal structures.

Recent laser-driven reconnection studies, as seen in the 2022 Nature Communications, show multiple plasmoids forming rapidly in hybrid collisional-collisionless regimes, with daughter plasmoids budding from the main sheet.

Coaxial helicity injection (CHI), in NSTX spherical tokamaks, produces plasmoids that merge or *spawn* new ones.

In these examples, the key mechanism is magnetic reconnection + tearing instability in the current sheet, which leads to plasmoid formation. The "budding" happens when the primary toroid becomes unstable. The result is "daughter" toroids carry away current and momentum.

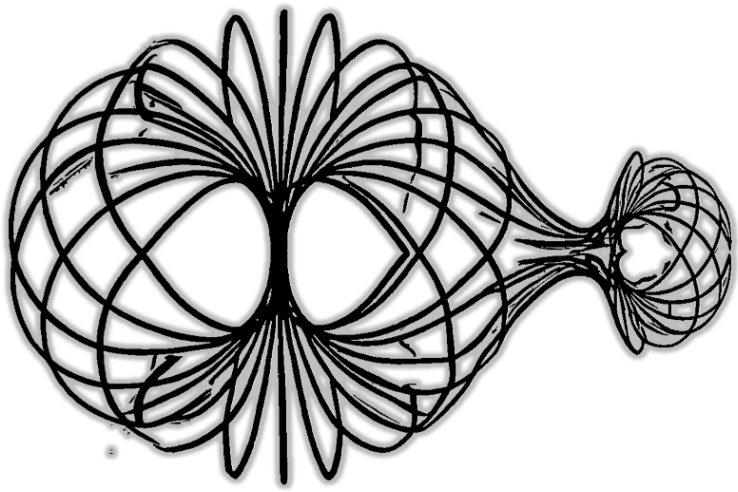
Another way that toroids self-replicate is in astrophysical jets and quasars. This is basically cosmic-scale *spawning*. In relativistic jets, Birkeland current filaments pinch into toroids. The resulting instabilities cause plasmoid ejection or budding along the jet axis.

Eric Lerner's plasmoid model, from lab z-pinches scaled up, predicts plasmoids form, pinch, and spawn smaller plasmoids that radiate broadband radio to gamma, and can be ejected as knots in jets.

Furthermore, observed in VLBI radio images, or quasar jets, discrete knots moving outward have been interpreted as successive plasmoid ejections from the central engine.

Coronal Mass Ejections (CMEs) from the Sun are sometimes toroidal plasmoids ejected from solar magnetic loops. Our own Sun, itself, can *spawn* new toroids by way of reconnection in the corona.

Yet another example of replication can be found with Hydrodynamic & Shear-Driven Toroids. This is self-organization without external fields. Recent experiments show toroidal microplasmas forming spontaneously under extreme hydrodynamic shear, like with a water jet impinging on a dielectric surface. This is spawning with no external EM field needed. The plasma self-organizes into stable, radiating toroids that can persist and potentially seed more.



Also, Peratt's filamentary plasma cosmology models show galactic-scale currents pinching into toroids that can fragment and spawn sub-structures.

There is no "magic" in any of this. It's just current-driven self-organization, tearing modes, and reconnection ejecting plasmoids that become new toroids. It's just observable science.

With all of that in mind, do we need to refine the "scientific" definition of life?

NASA and the National Academy of Sciences (NAS) both define life as: "Life is a self-sustaining chemical system capable of Darwinian evolution."

The European Space Agency (ESA), and the International Astrobiology Community define life as: "Life is a self-organizing, self-replicating system that is capable of evolving and maintaining itself in an environment far from thermodynamic equilibrium."

International Society for the Study of the Origin of Life (ISSOL) defines life as: "Life is a self-maintaining, self-reproducing chemical system capable of undergoing Darwinian evolution in an environment far from thermodynamic equilibrium."

Philosophers of astrobiology, Carol Cleland and Shelley Copley define life as: "Life is a bounded, self-maintaining chemical system that is capable of undergoing Darwinian evolution and that has arisen by natural processes from non-living precursors."

Synthetic biology pioneers, Gerald Joyce and Jack Szostak defined life as: "Life is a chemical system that is capable of Darwinian

evolution and that exhibits self-sustained replication with variation and heredity."

Assembly Theory pioneers, Sara Walker and Paul Davies defined life as: "Life is a physical system that produces a large number of complex objects with high assembly number through selection and evolution."

So, toroids pinch, bud, and spawn new toroids. The "parent" toroid gives its energy, vibrations, and source material to the "daughter" toroids. The environment in which the new or baby toroids are "spawn" in; plays a very large part in whether that toroid "lives or dies". If that daughter toroid "survives", it then has the opportunity to grow. And eventually pinch off daughter toroids of its own. Biologically, that is called "reproduction".

The toroids are constantly taking input from outside sources, like larger toroids. They also take suggestions from smaller toroids. Remember, everything is in the same plasma soup. What affects one can have an impact on another. They modify themselves in accordance with their environment. Biologically, that is called "evolution".

Personally, I think that the biggest problem with the inclusion of Darwinism into the definition of life, is that it excludes known living things. The Mule, or the Liger are very real and living organisms. They can be observed, felt, heard, smelled, and touched. They are most definitely alive. Yet the very definition of Darwinism excludes them. I think it's *time* for an update.

The next problem is with the definition of “biological”. It seems to be an issue of scale. Merriam-Webster defines biological as: of or relating to biology or to life and living processes. Oxford English Dictionary; “relating to biology or living organisms”. National Institutes of Health / U.S. National Library of Medicine; “relating to or involving living organisms or their products; relating to biology”. Britannica; “pertaining to the science of life and living organisms, including their structure, function, growth, origin, evolution, and distribution”. NASA, ESA, and ISSOL; “biological” typically means carbon-based, water-mediated, chemically complex systems that exhibit metabolism, self-maintenance, reproduction with heredity, and response to environment”.

All of these definitions implicitly or explicitly tie “biological” to carbon chemistry, aqueous environments, and Earth-evolved complexity.

Philosophically, the line “biological vs. non-biological” starts to look like a scale and chemistry prejudice. Like they are saying that “size matters”. Small and carbon-based stuff gets labeled biological. While large or plasmatic and magnetic-based stuff is considered; “just physics”. Only the smaller versions of the same processes get called ‘alive’ and bigger ones get called ‘astrophysics.’ Why does the rule change when the toroid gets big enough to make the math uncomfortable? You call it what you want, but let’s not pretend the pattern isn’t the same. This is hypocrisy in the label, not the pattern.

If biology is just a name for chemistry organized at a scale that we recognize as ‘alive,’ then perhaps the Universe is more biological than we’ve admitted.

Our definitions of 'biological' and 'life' may be in need of a serious update. Taking into account, the life of atomic particles, up to the life of galactic toroids in deep space. The definitions should be expanded, not narrowed. Perhaps we could further divide the definitions into new sub-categories. It seems that planets, like Earth, show the same lifelike characteristics as a 'biological' cell. Shouldn't that universal truth be recognized? And perhaps defined, maybe by scale?

With all this being true (as it is) then the **Big Bang** becomes the odd man out. The Big Bang theory is a story that needs a onetime miracle to start what toroids already do naturally, perpetually, and forever. I don't think the line between living and non-living is simply drawn by physics; it seems it may be drawn by people, people who desperately need the Big Bang to remain the "only story in town."

It's a simple fact that toroidal plasma structures self-replicate under the right conditions. In laboratory z-pinch experiments, in solar coronal mass ejections, quasar jets, and galactic filaments. A primary toroid pinches, fragments, and spawns new ones. No Big Bang is required; the system propagates itself through current-driven instability and reconnection. This mechanism operates at every scale, from the laboratory to the cosmos. The Universe doesn't need a singular, hot, dense origin point. It can be eternal and cyclical.

This doesn't necessarily disprove the Big Bang in every detail; it simply renders the need for one unnecessary. The observations of the filamentary cosmic web, or the self-organizing plasma structures, can be explained with far, far fewer assumptions, or

outright guesses. There is no need for dark matter, it's just the same physics we already see in every plasma lab on Earth.

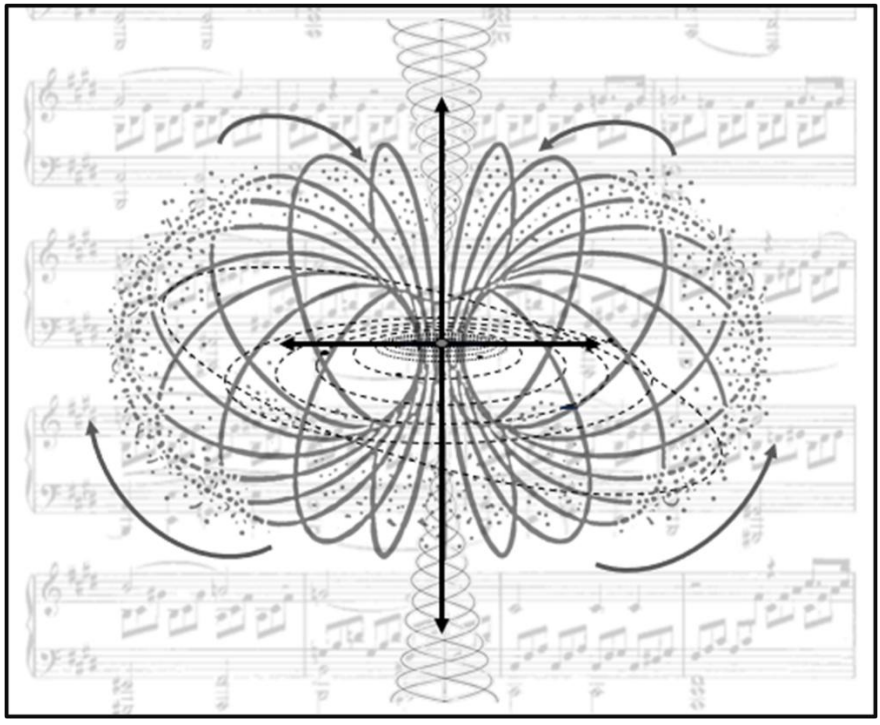
This perspective may feel radical to some, and that's okay. Science moves forward by considering alternatives, not by desperately clinging to one story. If toroidal self-replication holds up under scrutiny, it could open a simpler path to understanding the cosmos, for all of us.

The **Law of Conservation of Energy** states that energy doesn't die. The Big Bang starts out with energy death already being a thing, then energy is created from nothing. This is a singularity that, all by itself, defies the **first law of thermodynamics**. In toroidal plasma, energy is conserved forever. Just as it's defined by the Law of Conservation. It's representative of eternal transformation.

I have to mention one of the all-time great critics of Electric Universe theory, which my theory definitely saddles up to. *Wolfgang Pauli*, one of the 20th century's greatest theoretical physicists and a Nobel Prize winner, laid down the sickest burn in physics history. Pauli was already known for being brutally honest and impatient with sloppy thinking. When he was first exposed to EU, as a theory, he was unimpressed with incompleteness of the work. He cleverly addressed the lack of mathematical proof with, "That is not only not right, it is not even wrong." I truly admire the dry wit in his sentiment. I admire it so much that I hate to disagree with him, but I will anyway.

Personally, I think the Big Bang is *the wrong math* dressed up as the only math. It starts with a singularity nobody can explain, patches it with inflation nobody can test, then hides 95% of the universe behind invisible dark stuff that only shows up when the equations fail.

I don't think that the universe requires a *Primordial Singularity*, or T=0, that exploded just once. The Universe can make do with observable currents that keep looping and reproducing. To the people who spent decades burning the Electric Universe crowd for suggesting exactly that: the irony is almost poetic. The model you defended so fiercely, may have been the wrong math all along.



Requiem for the Haters

This is a requiem for the haters. Not to the haters of people, but to those out there, that are burdened by the reflex to hate anything that doesn't fit neatly, on the map they already carry.

To the Scientists and Doctors:

You've built a world of rigorous measurement and repeatable evidence. I respect that deeply. This proposed theory is not trying to replace your methods. I'm simply offering a different lens, from which to view things. One that starts from lived coherence and observable magnetic patterns, rather than that, which can only be double-blinded in the lab. If any piece of this ever becomes testable in your framework, I'd be the first to cheer the replication.

To the Cosmologists

You've spent lifetimes mapping the heavens with mathematics, telescopes, and unflinching rigor. You've wrestled with the largest questions, like origins, and expansion. You've built models that explain much of the observable universe with extraordinary precision. I honor that work deeply. This work doesn't pretend to replace your equations or your data. It simply starts from a different premise. What if the dominant force isn't gravity alone, but electricity and plasma currents organizing toroids at every scale? If that lens ever proves useful, even as a complementary view, I'd be grateful to see it tested against your observations. Until then, keep charting the stars the way only you can. The Universe is vast enough for multiple maps, and every honest seeker is moving toward the same light, some of us are just moving along different paths.

To the Psychologists:

Of course, I recognize the similarities and obvious explanations, that could attribute much of this theory to already existing paradigms in your work. I don't mean to step on your toes. You've mapped the mind's habits and healing paths with extraordinary care. You've defined the emotions, the traumas, the flow states, and the coherence effects. The emotion-memory loops in this book are not meant to override your work. Instead, I think that they lean heavily on it. If anything, I'm hoping this magnetic cascade model gives a biophysical "why" behind some of the states you already help so many people reach.

To all the new-age Gurus:

Many of you have been saying for decades that vibration, intention, and alignment matter. I've felt those truths in my own body. This work is not intended as a rebuttal to anyone's teachings. I think of it, more as an explanation or rather, a translation, of our shared ideas, into plasma physics, heart fields, and measurable coherence. We're all pointing at the same mountain. I'm just trying to show a different route to the top.

To the religious purists of every stripe:

Your traditions have carried the flame of inner knowing through centuries of what may equate to ridicule, subjugation, or outright suppression. I'm not here to debate doctrine. Nor do I claim that your path is incomplete. If prayer, silence, or faith already brings you into the same peace, coherence, and openness, that I have described, then you're already living the deepest part of this. I would encourage you to keep going, exactly as you are. Furthermore, by

no means am I suggesting that this science negates the presence of the divine. On the contrary, one may suggest that it further proves it.

To anyone else who may read this and feel the old defenses rise: know this, I see you. **I didn't mean to offend**.

If you've devoted your life to understanding the world through your own chosen lens, be that evidence, healing, intuition, or faith, that devotion deserves respect. I'm not trying to prove you wrong or replace your map with mine.

I'm simply offering an explanation on how things work, that's based on real world plasma physics. I am also offering a way to interact with time, and potentially improve your ride through the Universe.

If you still find yourself in strong disagreement, that's cool.

You, do you.

Appendix 1: Math

Symbol Cheat Sheet

- **Ω_cascade** = nested resonant field from larger scales
- **J** = current density vector (A/m²)
- ⊗ = resonant electromagnetic coupling operator (Alfvén-wave mediated, non-commutative)
- **M_array** = personal antenna array matrix (dimensionless weights)
- **∇J_geo** = local geometric/current gradient (A/m³)
- **μ** = coupling constant (empirical, ~10^{-6} to 10^{-3} depending on coherence level)
- **Φ_personal(t)** = personal phase/alignment scalar (0–1)
- **B** = magnetic field (T)
- **ρ** = plasma density (kg/m³)
- **μ_0** = vacuum permeability ($4\pi \times 10^{-7}$ H/m)
- **η** = magnetic diffusivity (m²/s)
- **L** = characteristic length scale (m)
- **v_A** = Alfvén speed (m/s)
- **ΔΦ_time** = experienced phase shift in personal time flow (dimensionless or radian-equivalent)
- **Ψ_intent** = scalar or field representing focused intention (clarity, direction, will)
- **Ψ_emotion** = scalar or field representing emotional state (positive = amplifying, negative = damping)
- **C_h** = heart coherence index ($0 \leq C_h \leq 1$, derived from HRV metrics, e.g., power in 0.1 Hz band)
- **∇** = gradient operator (del/nabla, directional derivative)

These are phenomenological models, conceptual frameworks drawn from observed plasma behavior, biomagnetic measurements, and personal coherence experience This is not a complete field theory or replacement for standard physics. All coupling (⊗) is empirical/resonant, not rigorously derived from first principles. Open questions and simplifications are noted inline.

1. The Cascade Equation

The cascade is a nested resonant coupling across scales:

Ω_cascade = (((J_universe ⊗ J_galaxy) ⊗ J_solar) ⊗ J_earth) ⊗ J_heart

Step-by-step expansion:

Ω_cascade =

J_heart ⊗

(J_earth ⊗

(J_solar ⊗

(J_galaxy ⊗ J_universe)))

Each ⊗ represents resonant electromagnetic coupling via frozen-in flux (Alfvén's theorem) and Ampère-Maxwell law:

$$\nabla \times \mathbf{B} = \mu_o \mathbf{J} + \mu_o \varepsilon_o \partial \mathbf{E}/\partial t$$

Dominant coupling occurs at ULF frequencies with low dissipation in high-conductivity plasma. Energy and topology are preserved across scales via current continuity and magnetic reconnection.

2. Sync Strength Equation

S_sync = μ · (M_array · Ω_cascade) · ∇J_geo

Unpacked:
S_sync = coupling_constant ×
(personal_antenna_array_matrix · incoming_cascade_field) ·
local_current_gradient

- **μ ≈ 10^{-6} to 10^{-3}** (empirical; higher when HRV is coherent)

- M_array = diag (M_heart, M_cortex, M_limbic, M_cerebellum, M_medulla, ...)
(M_heart dominant, ~100× stronger than brain fields)

- Ω_cascade = nested field from larger scales (ULF/plasma current density at Earth scale)

- **∇J_geo ≈ ∂J / ∂x** (local gradient created by focused intention, emotion, and physiological state)

Interpretation:
The personal array couples to the incoming cascade. The strength of that coupling is amplified by the local gradient the individual creates through coherence and intention. When μ is high (good HRV, positive emotion), S_sync becomes large → event stream bends toward the direction of focus.

3. **Core Sync Relation** (Human Scale)

ΔΦ_time = ∇(Ψ_intent − Ψ_emotion) · C_h

Unpacked:
ΔΦ_time = gradient_of_net_motivational_field ·
heart_coherence_index

- ΔΦ_time = experienced phase shift in personal time flow (dimensionless or radian-equivalent; how much "time bends" for you)
- ∇(…) = spatial/temporal gradient operator (the directional "pull" or vector field)
- Ψ_intent = scalar or field representing focused intention (clarity, direction, will)
- Ψ_emotion = scalar or field representing emotional state (positive = amplifying, negative = damping or scattering)
- (Ψ_intent − Ψ_emotion) = net motivational vector (intention minus emotional drag)
- C_h = heart coherence index (0 ≤ C_h ≤ 1, e.g., normalized power in 0.1 Hz HRV band, vagal tone proxy)

· = dot product (projects the gradient onto the coherence direction)

Interpretation:
The amount time warps for you, is the directional push of (clear intention minus emotional baggage) multiplied by how coherent your heart field is right now. Positive coherence → large positive gradient → stronger sync toward desired outcomes. Negative emotion → weak or reversed gradient → weaker or misaligned sync.

4. **Supporting Instability Equations**

(Self-Replication Mechanism)

These equations show how a current sheet (J) in a magnetic field (B) becomes unstable when the Lundquist number $S = Lv_A / \eta > \sim 10^4$ (where L is sheet length, $v_A = B / \sqrt{(\mu_o \rho)}$ is Alfvén speed, η is resistivity). At high S, tearing modes grow, fragmenting the sheet into plasmoids that pinch off into toroids. The self-replication (or "budding") of toroids arises from instabilities in high-current plasma systems. The key equations are:

1. Continuity Equation (mass conservation):
$$\partial\rho/\partial t + \nabla\cdot(\rho v) = 0$$

2. **Momentum Equation** (includes magnetic Lorentz force):
$$\rho(\partial v/\partial t + v\cdot\nabla v) = -\nabla p + (\nabla\times B)\times B / \mu_o + v\nabla^2 v$$
(where the $(\nabla\times B)\times B$ term drives the pinching that leads to instability)

3. **Energy Equation** (includes Joule heating):
$$\partial e/\partial t + \nabla\cdot[(e + p)v] = J\cdot E - \nabla\cdot q + \Phi$$

4. **Induction Equation** (with resistivity η for reconnection):
$$\partial B/\partial t = \nabla\times(v\times B) - \nabla\times(\eta\nabla\times B / \mu_o)$$
(the resistive term $-\nabla\times(\eta J)$ allows field lines to break and reconnect, enabling fragmentation)

5. Ampère's Law (ignoring displacement current for MHD):
$$\nabla\times B = \mu_o J$$

Here are the three key formulas for a self-replicating magnetic toroid.

Lundquist Number (threshold for instability & self-replication)

$$S = L v_A / \eta > \sim 10^4$$

(Current sheet becomes unstable and fragments into plasmoids/toroids when S exceeds critical value.)

Alfvén Speed (characteristic speed of magnetic disturbances along field lines)

$$v_A = B / \sqrt{(\mu_o \rho)}$$

(Speed at which toroids propagate and communicate energy in plasma.)

Tearing Mode Growth Rate (how fast fragmentation/budding occurs)

$$\gamma \approx (\eta / L^2)^{0.6} \times (v_A / L^{0.4})$$

(Exponential growth rate of tearing instability leading to plasmoid chains and daughter toroids.)

5. Caveats & Open Questions

All ⊗ couplings and gradients are phenomenological (based on observed plasma behavior and personal HRV data); exact operator forms require future simulation/experiment.

μ, k (if introduced in ∇J_geo expansions), and C_h are empirical — calibrated from personal coherence measurements.

No claim of violating known physics — only reinterpreting scale-invariant patterns.

The human-scale relation (ΔΦ_time) is especially phenomenological and subjective; it remains an active area of personal exploration rather than rigorous derivation.

Appendix 2: Medical

This appendix focuses on endogenous biogenic magnetite (Fe_3O_4 nanoparticles) and related magnetically sensitive materials in selected brain regions. Values are from studies emphasizing natural biomineralization (not pollution or neurodegenerative accumulation). Concentrations are in ng/g wet tissue or particles/g where reported. Data varies by age, individual, and measurement technique (TEM, SQUID magnetometry, ICP-MS). The heart toroid field strength and the vagus nerve role in presentment, is included for context.

1. **Key Terms & Units**

Magnetite (Fe_3O_4): Superparamagnetic nanoparticles, 10–100 nm, often chained/clustered; potential role in magnetoreception or biomagnetic signaling.

Particles/g: Number of magnetite particles per gram tissue (typical range 10^7–10^9).

ng/g: Nanograms per gram wet tissue.

Cryptochromes (CRY1/CRY2): Light/magnetic-sensitive proteins; expression qualitative.

Piezoelectric Calcite: $CaCO_3$ microcrystals with piezo properties; concentration qualitative or µg/g.

2. Magnetite & Nanoparticle Data by Region

Hippocampus (memory, synaptic plasticity)

Magnetite: 100–500 ng/g (up to 10^8–10^9 particles/g in high-iron samples)

Cryptochromes: Low to moderate expression (CRY1/CRY2 present; circadian/memory link)

Piezoelectric Calcite: Minimal/not detected

Notes: Magnetite clusters in neuronal processes; potential role in magnetic navigation. High density of superparamagnetic magnetite clusters; linked to memory consolidation and possible magnetosensing pathways.

Pineal Gland (melatonin, circadian rhythm)

Magnetite: 50–200 ng/g (often higher near calcified regions)

Cryptochromes: High expression (CRY1/CRY2 abundant; core clock proteins)

Piezoelectric Calcite: High (1,000–2,000 µg/g; microcrystals <20 µm, piezoelectric via Raman)

Notes: Calcite crystals hypothesized as transducers; magnetite + cryptochromes may form light/magnetic sensing system. Co-localized with hydroxyapatite crystals.

Basal Ganglia (movement, reward; substantia nigra, globus pallidus)

Magnetite: 200–800 ng/g (highest in brain; 10^9 particles/g in iron-rich zones)

Cryptochromes: Moderate expression (circadian modulation of dopamine)

Piezoelectric Calcite: Low/not significant

Notes: Magnetite abundant in substantia nigra; supports motor timing and reward circuits. Iron-rich zone; magnetite nanoparticles abundant, often chained or clustered; tied to dopamine pathways and motor control.

Cerebellum (coordination, balance)

Magnetite: 150–600 ng/g (frequently the highest concentration in whole-brain surveys; 10^8–10^9 particles/g)

Cryptochromes: Low to moderate expression (circadian motor timing)

Piezoelectric Calcite: Low/minimal

Notes: Nanoparticles: 80–300 ng/g (frequently the highest concentration) Consistent high levels; superparamagnetic particles. Magnetite in Purkinje cells and granular layer; potential role in timing and coordination.

Medulla Oblongata (autonomic control, vagus hub)

Magnetite: 100–400 ng/g (moderate to high; near vagus roots)

Cryptochromes: Low expression (circadian autonomic regulation)

Piezoelectric Calcite: Low/not significant

Notes: Magnetite in glial cells and neurons; proximity to vagus may aid autonomic magnetic sensitivity (speculative). near vagus nerve roots. Links to vagal tone; magnetite may aid magnetic sensing in animals (hypothetical in humans).

Heart (toroidal magnetic field)

Magnetite: 20–100 ng/g (lower than brain but present in cardiac muscle)

Cryptochromes: Present (CRY1/CRY2 in cardiac tissue; circadian heart rhythm)

Piezoelectric Calcite: Minimal/trace in valves

3. **Heart Toroid Strength** (Magnetic Field)

The heart generates a toroidal magnetic field measurable up to 3 feet away. Peak magnitude: ~14 nT (nanoTesla) inside the heart, detectable externally at ~10–100 pT (picoTesla). Strength: 100 times greater than the brain's magnetic field.

Notes: Measured via magnetocardiography (MCG); field envelopes the body and influences cellular processes. Coherence (HRV) amplifies organization.

Peak field at the chest surface: 10–100 picotesla (pT) (measured with SQUID magnetometers in magnetocardiography, MCG). The field extends several feet outside the body in a clear toroidal pattern (detectable up to ~1–2 meters away in quiet environments). Frequency: dominant at 1 Hz (heartbeat), with harmonics and low-frequency components (0.1 Hz in HRV coherence) that can couple with external ULF fields.

4. **Vagus Role in Presentiment**

Presentiment experiments (Radin, Mossbridge, etc.) consistently show that the heart and gut show physiological changes (e.g., heart-rate deceleration, skin conductance increase) before an emotional or startling stimulus appears. The vagus nerve is the direct wiring that links these visceral responses to the brain and then back again.

- Afferent (bottom-up) path: The vagus nerve carries real-time signals from the heart (cardiac branches) and gut (enteric nervous system) to the brainstem (nucleus tractus solitarius) and then up to higher areas like the insula, anterior cingulate, and prefrontal cortex.

In presentiment studies, the heart's pre-stimulus deceleration is mediated by vagal tone. A sudden increase in parasympathetic activity via the vagus nerve before the stimulus, as if the body is bracing itself.

- Efferent (top-down) path: The vagus also sends calming or activating signals back down to the heart and gut. In coherence states (high HRV), vagal tone strengthens, making the system more responsive to subtle cues. This potentially amplifies presentiment signals.

- The vagus nerve is the physical bridge between the heart's powerful toroidal field and the brain's nested toroids (cortex + limbic). It's the hard-wired channel for the heart to "whisper" to the brain (and vice versa) in real time.

- High vagal tone (measured as HRV) correlates strongly with presentiment effects in studies. People with better heart coherence show stronger pre-stimulus responses, suggesting the vagus helps "tune" the body to future-oriented signals.

- It also ties into fight-or-flight prep: sudden vagal withdrawal (sympathetic surge) can happen pre-consciously, explaining why the body reacts before the mind knows why.

4. Caveats

Values are from biogenic-focused studies (Kirschvink, Posfai, Maher, Radin, Mossbridge, etc.); higher than pollution/toxicology papers.

Magnetite often chained/clustered; role in magnetoreception is established in animals, hypothesized in humans.

Cryptochromes: Expression from mRNA/protein studies; magnetic sensing role speculative in humans.

Piezoelectric calcite: Confirmed in pineal; transducer function unknown.

No diagnostic claims — consult medical professionals for health applications.

Appendix 3: Exercises

Quick personal story: I served over two decades in the U.S. Army, most of that time was in the Special Operations community. I spent well over ten years on Special Forces teams. On those Special Forces teams, everybody has different specialties and responsibilities. Weapons guys do weapon maintenance and range training. Medics do medical stuff and life-saving techniques. Engineers build stuff and then blow stuff up. Communications guys communicate, use, maintain, and work with more sensitive communications equipment. Intelligence guys build target packets track the activity of bad guys, and so on.

It's a common practice for any SF team to cross-train each other on vital parts of everyone else's job. It creates redundancy and allows for a "next man up" mentality if one of the guys 'goes down' for whatever reason. No one man is the lynchpin of failure in the event of his sudden demise. Everyone trains on everyone else's job, 'just in case'. My specialties were weapons and intelligence. Helping teammates on the range is a given. But how do I transfer the intelligence portion of the job to my team? Nobody is interested in cross-training on how to collate intelligence reports, or spending hours training on 'Death by PowerPoint', by building mock-up target package presentations. So, I tried to focus on neuro-kinetic aspects of our job. The "eye-training" or hand-eye coordination exercises, that kind of thing.

One day, while we were in the States, training (this would be in-between deployments) we got hooked up with a guy from the HeartMath Institute. None of us had ever heard of HeartMath. I

think they were still a new start-up, at the time. I can't remember how he got offered to us (I'd love to take credit, but it wasn't my idea). Regardless, I jumped at the opportunity. It created an opportunity to "check the box" for all of my cross-training responsibilities. It encompassed weapons and intel (sort of). After all, it sounded like some kind of neuro-kinetic training. We already had the ammo and ranges scheduled as part of our normal training. It was an easy fit.

We took the HeartMath guy out to the training range with us, got a quick briefing on the equipment he wanted us to wear, and listened to him explain what he was looking for. He needed us to shoot while wearing a little devise that monitored, something. The device was a battery-operated pager like device, with a single wire that led up to a little ear-clip that we attached to one of our ears. It was small, lightweight, and simple, and it didn't get in the way of anything. We quickly came up with a simple plan and a 'course of fire' that would satisfy his requirements, and went to work.

The training design was simply. We would do a series of "scored" shoots, on scorable paper targets, with the device on. We would compare and contrast the results later. Some of the iterations were done just as we always do, and some required us to breathe in a special way, and wait for a little light on our device to turn green, and then shoot. The 'round count' and target array stayed the same throughout the day's exercises. We would start out simple and slow, one course in the routine way, then again using his breathing technique.

As the day built, we would start adding additional 'stressors' to the shoot. We would add the addition of doing a number of 'push-ups'

and then popping up and shooting the course of fire. We would do a short 'kit-run' before stopping at the firing line and completing the course of fire. We increased the intensity of the run by adding a few obstacles, from a nearby obstacle course to our kit run, and then stop at the firing line and completing the course of fire again. Each time the shoot was completed twice, once as we always do, then a second time, while paying attention to the little device and waiting for the pagers 'little green light' to turn on before shooting.

The only problem was that we were too consistent with our shooting and scores. Our unit was (among other things) specifically tasked with providing "lethal precision", while under duress, in highly fluid, and kinetic environments. We were expected to shoot perfectly under any conditions already. This stuff was our 'bread-n-butter'. So, the actual scores didn't vary all that much, if at all. Which, I imagine, may have disappointed the HeartMath guy a little. I think he was expecting a much more radical difference in the scoring, between the standard shoot and the "green light shoots".

At the end of the day, we all turned over our little pagers and ear-clips back to the HeartMath Rep. We cleaned up the range, packed everything up, and went home. The HeartMath guy processed all the data collected by the 'pagers' and printed out, each of us, a multi-sheet analysis with numbers and graphs that showed the results for each individual shooter. It provided a detailed comparison of how the concept of 'coherence' actually did create some minor differences in our already (nearly perfect) shooting scores.

Despite there not being a large difference between the shoots, the minor difference was notable. And we took that very seriously. Despite our hubris and shooting excellence, he did successfully show

us a way to improve. It was a new method for charting success. The HeartMath material provided a new metric that was quantifiable and beneficial. For us, it was the introduction of “zone training”.

The HeartMath guy doesn’t know this, but we each spent a lot of time going over those charts. I wrote a ‘white paper’ to our commander, explaining why this was such a good thing, and that it should be pursued, as it gave him, and the teams, a new metric by which to improve our skill sets and to track readiness.

However, soon thereafter, another command in the area had heard about the program and swept the HeartMath guy away with a bigger and probably more financially beneficial contract. It seems his services were needed elsewhere. We never saw him again after that, but we never forgot. I never forgot.

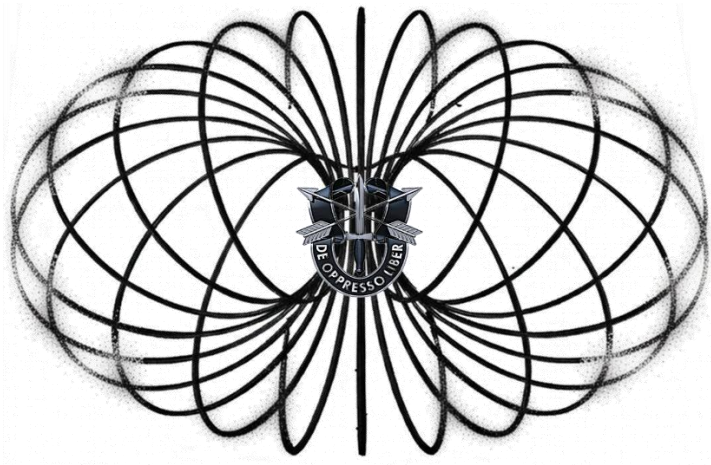
Years later, after I had retired from the military. I found myself still reading about various neuro-kinetic studies. I was reading Stealing Fire, by Steven Kotler and Jamie Wheal. I realized some of the obvious similarities between their research and what I had experienced, briefly, in the army.

I bought a heart rate monitor (POLAR chest-strap type) and downloaded the Elite HRV app on my phone. I began my rudimentary personal practice of HRV. That was my second introduction to coherence training. After a while, I would find myself taking 5 -10 minutes, now and then, and doing the breathing exercise, without any equipment at all. I’ll tell you, you can feel the moment you go into coherence. You don’t need the fancy equipment of informative apps to do any of this. You have everything you need to achieve coherence built into your body.

The feedback that these applications provide is useful, though. Personally, I like the bio-feedback, that's provided by most of these programs. But hey, I'm an old intel guy I like quantifiable charts and stuff like that.

I eventually dropped the cash on a proper HeartMath setup. It is still the best, in my opinion, at tracking your personal coherence, and they have programs that can link you up with a more international coherence community. They put together group like sessions and they provide a space for your more solitary or personal sessions.

Sometimes I find myself still using a simple breath timer, without the heart rate monitor. I do it to just 'lock in', and enjoy the coherence experience itself. No charts, no programs, just me, in the moment, in my heart.



Disclaimer: Just to be clear: I'm not sponsored by, affiliated with, or paid by HeartMath, Elite HRV, Polar, or the Flow Genome Project. These are the devices, apps, and projects I've actually used over the years. Nothing more, nothing less.

HRV coherence training involves slow, rhythmic breathing (typically ~0.1 Hz or 5–6 breaths per minute) combined with heart-focused attention and positive emotion to increase parasympathetic (vagal) tone and heart rate variability.

The following are key techniques and protocols from major researchers and programs.

1. **HeartMath Institute** (Rollin McCraty, Howard Martin, et al.)
HeartMath pioneered commercial HRV biofeedback and coherence training since the 1990s.

Quick Coherence® Technique
Focus attention on the heart area. Breathe slowly and deeply through the heart (inhale 5 sec, exhale 5 sec). Activate a positive feeling (appreciation, gratitude, calm).
Duration: 1–5 minutes, repeatable anytime.
Goal: Shift to coherent HRV rhythm quickly.

Heart Lock-In® Technique
Similar to Quick Coherence but longer: sustain positive emotion while breathing through the heart. Use biofeedback (emWave/Inner Balance) for real-time coherence score.
Duration: 5–20 minutes.
Goal: Establish new baseline coherence reference pattern.

Inner-Ease™ Technique (variant)
Heart-focused breathing + ease/renewing emotion.
Often used before stressful events.

2. **Resonance Frequency Breathing** (Paul Lehrer, Richard Gevirtz, et al.)
Originated in biofeedback research (2000s); emphasizes finding individual resonant frequency (~0.1 Hz).

Optimal/Resonance Frequency Protocol
Breathe at personal resonant frequency (often 5.5–6.5 breaths/min; inhale 4–5 sec, exhale 5–6 sec).
Use HRV biofeedback to find frequency that maximizes 0.1 Hz peak.
Duration: 10–20 minutes daily.
Goal: Maximize baroreflex gain and HRV amplitude.
Researchers: Lehrer (Rutgers), Gevirtz (Alliant Intl Univ).

Preset-Pace RF (common adaptation)
Breathe at fixed 6 breaths/min (5 sec in, 5 sec out).
No biofeedback needed initially.

3. **Slow Diaphragmatic / Belly Breathing** (General Biofeedback & Mindfulness)
Widely recommended outside HeartMath (e.g., in clinical HRV studies and apps like ***Elite HRV***).

Diaphragmatic Breathing
Hand on belly, breathe so belly rises first (not chest).
Inhale 4–6 sec, exhale 6–8 sec.
Duration: 5–10 minutes, multiple times daily.
Goal: Activate vagus nerve, increase parasympathetic tone.

4-7-8 Breathing (Andrew Weil adaptation)
Inhale 4 sec, hold 7 sec, exhale 8 sec.
Goal: Quick calm; boosts HRV in short sessions.

4. **Box Breathing** (Military & Performance Protocols)
Popular in Navy SEALs, athletes, and stress management (no single originator, but widely taught).

Box Breathing
Inhale 4 sec, hold 4 sec, exhale 4 sec, hold 4 sec. Repeat.
Duration: 4–8 cycles (2–5 minutes).
Goal: Stabilize HRV under stress.

5. **Other Notable Methods**

Acem Meditation (Norwegian technique): Non-directive meditation with sound repetition; 20 minutes → increased HRV (European Journal of Preventive Cardiology study).

Alternate Nostril Breathing (Pranayama): Inhale left nostril, exhale right, alternate. 5–10 minutes → boosts parasympathetic HRV.

4-6 Breathing (Marco Altini / ***HRV4Training app***): Inhale 4 sec, exhale 6 sec → resonant frequency approximation.

Summary

- **Most common rate**: 5–6 breaths/min (resonance frequency)
- **Key researchers**: Rollin McCraty (HeartMath), Paul Lehrer, Richard Gevirtz, Marco Altini, etc.
- **Tools**: HeartMath devices (emWave, Inner Balance), Elite HRV, HRV4Biofeedback apps, or simple timers.
- **Core principle**: Slow breathing + heart focus + positive emotion maximizes 0.1 Hz HRV peak and coherence.

These are the most cited and studied HRV coherence techniques. I'm sure there are others. If I missed one, please don't be offended. Instead, reach out and elucidate me. Practice safely; consult professionals for health applications.

Recommended Reading

Wallace Thornhill and David Talbott wrote a pair of books together that are really worth a read.

- **The Electric Universe** (2007)
- Thunderbolts of the Gods (2005)

If you want to dive deeper into the math; may I suggest: **Toroidal Flux Pulse, Rewriting the Universe**. by Carlos Guevara. It's a brilliant collection of mathematical proofs, only recently published.

Steven Kotler has an incredible series of books about human performance they are all worth a read;

- **The Rise of Superman**: Decoding the Science of Ultimate Human Performance
- **Stealing Fire**: How Silicon Valley, the Navy SEALs, and Maverick Scientists Are Revolutionizing the Way We Live and Work (co-authored with Jamie Wheal)
- **The Art of Impossible**: A Peak Performance Primer

Personally, I'm also a fan of his book *Gnar Country*, but it's not really relevant to this discussion.

In 1869, artist **George Catlin** published *Shut Your Mouth and Save Your Life* after observing Native Americans' closed-mouth breathing habits. He argued that nasal breathing was the biological default for health and longevity.

HeartMath has published a series of books that deal specifically with HRV:

- *Heart Intelligence: Connecting with the Intuitive Guidance of the Heart*
- *The HeartMath Solution*
- *Transforming Stress: The HeartMath Solution to Relieving Worry, Fatigue, and Tension*
- *Transforming Anxiety: The HeartMath Solution for Overcoming Fear and Worry and Creating Serenity*
- *The HeartMath Experience*

Other books that you may find relevant:

The Universe is a Doughnut, by Mr. Stephen C Shaw

The Wraparound Universe, by Jean-Pierre Luminet

Morphic Resonance, by Rupert Sheldrake

Sync: The Emerging Science of Spontaneous Order, by Steven Strogatz

Processional Time and the Evolution of Consciousness: How Stories Create the World, by Richard Heath

Schumann Resonance, Brainwaves, Neuro-Feedback and Beyond, by Igor Nazarov

You² (You Squared) by Price Pritchett

The Cathar Dialogues, by Johny Bineham

Brotherhood of the Afflicted, by Clif High

The Secret, by Rhonda Bryne

The Secret Teachings of All Ages: An Encyclopedic Outline of Masonic, Hermetic, Qabbalistic and Rosicrucian Symbolical Philosophy, by **Manly P. Hall**

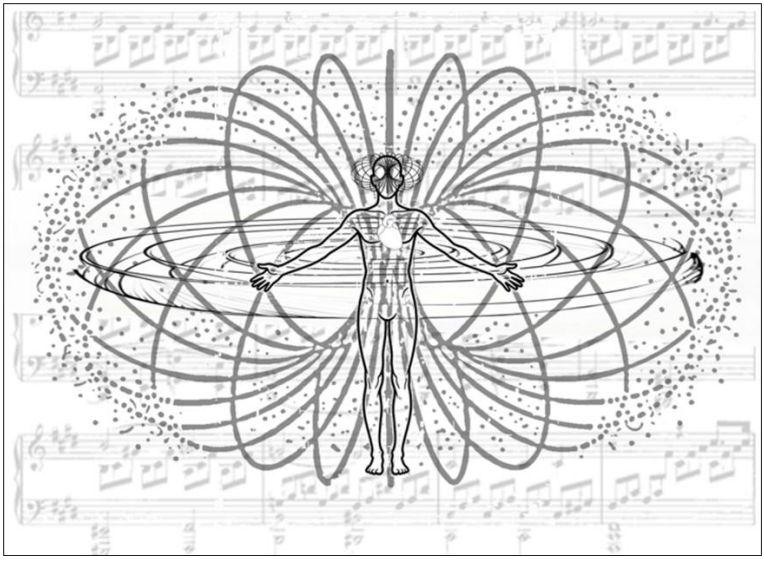
I'd recommend picking up a cheap copy of T*he Emerald Tablet of Hermes.* Allegedly authored by Hermes Trismegistus, or Thoth, or *unknown.* I have the paperback of various translations from Watchmaker Publishing.

The Energy Grid: Harmonic 695, The Pulse of the Universe, by **Bruce Cathie**. Cathie's work proposed a global geometric lattice of energy. While his harmonic math remains unverified and speculative, the notion of an invisible organizing grid across the planet echoes the nested toroidal currents in this book. I anchor it in plasma physics, magnetic reconnection, and measurable heart coherence, rather than in just numerology. Just the same, I do believe that he properly discovered a lower level of the magnetic torus, field lines.

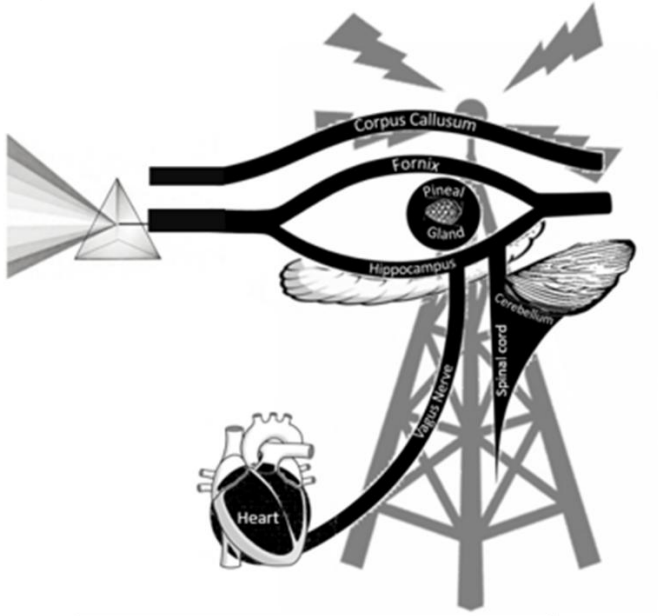
On the "gravity side" **Brian Greene** (a national best seller) has an excellent series of books worth reading. They are:

- *The Elegant Universe*
- *The Fabric of the Cosmos*
- *The Hidden Reality*
- *Until the End of Time.*

While I don't agree with his opinion on everything in the cosmos, I can certainly appreciate his skill at explaining things, of a very complex nature, to a simpleton like me.



The ancient Egyptians had a meditation practice.
They had multiple books, specifically about
Purposeful Breathing
And its ability to connect one with the Divine.



I haven't invented something new here;
I have redefined something very, very old.